

Advance Classic

USER GUIDE

OAK-ADV-02

ADVANCE CLASSIC - OAK

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5. Limited Warranty

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- replacement of the media or
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7. No Other Warranties

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9. General

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- b) This agreement shall be governed by the laws of the United Kingdom.
- c) This agreement shall not create an agency, partnership, franchise, or any other form of legal association.
- d) This agreement constitutes the entire agreement between the parties with respect to the subject matter thereof.
- e) This license is effective until terminated. You may terminate it at any time by destroying the software together with any backups. The license may also be terminated if you fail to comply with the terms and conditions of the agreement.

Chapter One

INTRODUCTION

1.1

Introduction to Advance Classic

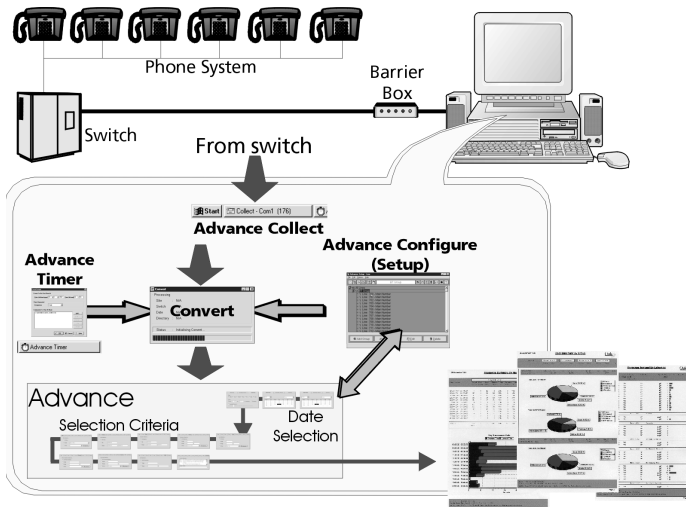
Thank you for selecting Advance Classic, the very sophisticated yet easy to use Telecommunications Management System from Oak.

The Advance software suite takes all of the accumulated knowledge gained from the Advance for DOS and Advance for Windows product range over the last ten years and builds upon its success.

The Graphical User Interface of Microsoft Windows has provided new visual ways to present telecommunications management information and allows users familiar with other Windows software to be up and running very quickly.

Product Overview

Advance Classic Call Management comprises a number of software modules which work together to provide effective call logging and reporting functions.



The core applications are **Advance** (the reporting module) and **Advance Setup**. **Advance Setup** holds all the information required for accurate and meaningful reporting of call data.

One note of caution needs to be sounded. The call data (and the information continued within the call records) depends entirely on the information provided by your particular switch (or PABX). The switch output is the limiting factor to the quantity and quality of reporting you are able to achieve.

Advance Setup

In general, configuring **Setup** to work with your particular system is a once-only task. Apart from routine maintenance of call costing tables, the software module should require no further attention, unless changes are made to the telephone system.

Advance Setup holds information on the phone system, phone lines, extensions, dialling codes, private wire networks, etc. **Setup** also is used to maintain the directory structure for the site (or sites). The accuracy of reporting depends entirely on the accuracy of the settings within this module.

To assist you in becoming familiar with the way **Setup** functions and the

concepts behind the configuration, we have included a 'dummy' company and site to enable you to practice without the risk of making mistakes which would affect the quality of your own reporting.

Advance (Reports)

The main **Advance** module is the software most employed by end-users of our Call Management software. As previously noted, **Advance** relies on **Setup** to provide accurate information on your telephone system and its settings.

The software comprises five basic report 'classes'; each of which can be manipulated by applying selection criteria (via easy to use tabs) to the basic call data. This highly versatile system enables you to extract exactly the right information for your specific needs. As previously noted, the exact nature of the reporting information you are able to achieve is limited by the capabilities of your phone system switch.

Advance Collect

This software module is the 'base' of the Advance system. **Collect** *has to run continuously* in order for all the call logging information from the switch to be 'captured'. **Collect** accepts the SMDR (call logging output) from the switch, via our **Barrier Box** and the computer **COM** port, and stores it on the hard disk as 'collect' (*.COL) files. The data held in the COL files is sequential and is constantly being added to by your phone switch. At midnight the current COL file is closed and a new one opened.

Advance Convert

Whilst our **Collect** module gathers the call data from your switch, **Advance Convert** processes this information (normally once a day) into a form which is useable by **Advance**.

Within this software are 'translators' which are able to 'interpret' the output of a wide variety of telephone switches and make sense of the information. These translators are constantly updated by us, to take into account new switch types and changes in the format of the SMDR output.

The COL (collect) files are 'converted' into 'TEL' files by this software. The

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data useful within the COL file is copied into a TEL file, which holds all the call data for the month. As a result of the conversion process, the monthly TEL file is being added to on a daily basis. The scheduling of the conversion process is controlled by another software module: -

Advance Timer

This is the 'event' scheduler for the Advance Call Management software suite. It uses the computer reference time as its clock. As you can see, the accuracy of the timing is therefore dependent on the accuracy of your computers own clock! It is well worth checking what time the computer thinks it is at least once a month. In many cases, thousands of pounds worth of computer hardware is incapable of keeping time as well as a £3.00 quartz watch bought from a market stall!

Problems can be encountered changing PC time with *some* switch outputs, e.g. event log output from the SDX Index, etc.

How Advance helps you

The office telephone system plays a vital role in the running of any organisation no matter how large or small. It allows staff within the organisation to communicate with each other and the outside world both orally and electronically. If the telephone system fails to perform in any area, it can have a dramatic effect on the operation of the organisation.

Fortunately, the Advance Telecommunications Management System can connect to your telephone system to provide up-to-the-minute management information, statistics and graphs that will help ensure that the telephone system performs well.

Advance will help you to....

- reduce communications costs
- increase communications efficiency
- maximise the effective usage of the telephone system
- monitor people's time

Advance enables you to monitor and reduce ...

- the time taken to answer calls
- the time taken to transfer calls to the correct extension
- the time taken to deal with calls
- the number and cost of calls made by an extension or a department

Advance saves you money by...

- helping you to select the most suitable carrier

There are a significant number of carriers in addition to the traditional carriers BT and Cable & Wireless, like Energis, Interoute, Scottish Telecom & MCI-WorldCom who can handle PSTN (Public Switched Telephone Network) and PW (Private Wire) calls. For a company's particular calling pattern, one may be significantly cheaper than another and should be considered if optimum discounts are to be achieved.

- determining the correct number of lines required

Only with accurate call statistics can the current usage of lines be determined. If lines are under-utilised, they can either be discontinued or made available for alternative call routing. Too high a usage can result in many callers receiving the engaged tone.

Getting the Most From Advance

Advance is a very powerful and sophisticated suite of programs which if used properly, will help improve your business communications efficiency. However, a little planning is needed, in order to get the most from Advance and a few regular activities which, though not very time consuming, will make the operation of the system smooth, reliable and fully beneficial.

Setting Up

The setting up of Advance is fully configurable. You are able to enter details of extensions, lines, phone numbers, account numbers, costing details and reporting details. By entering these details and by keeping them up to date, reports will be more meaningful and more accurate.

Accurate Costing

For totally accurate call costing, the provision of metered units or the exact talk duration is required. When available, these methods should be used. However, in more than 75% of cases, the total call duration is given and total duration based call costing, often referred to as algorithm costing, is used to give near accurate costing.

The total duration normally includes the time to dial, the time to connect over the PSTN network, the time that it is ringing before the call is answered and, when it is connected, the actual talk time.

Advance makes allowances for each part of the call setup time to help derive the actual talk time from the total duration. These allowances normally function very well in their standard settings, but can be fine tuned to match a specific organisation's use of the telephone.

The only real drawback with this method of costing calls is the fact that Advance is given no proper indication about whether a call is actually connected or not. In some circumstances therefore, a call made by an extension user can have a cost associated with it, even though it was not answered; perhaps after ringing for a long time and, conversely, a very short duration call that was connected, may not have a cost associated with it.

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Now, while this might balance out to give a department or extension user near accurate total costings over a number of calls, it can be an emotive subject, when an extension user is charged for a telephone call that wasn't answered. However the same extension user is unlikely to complain about getting free calls (which can be the case for very short duration connected calls) !!

Please note: Calls are costed within the constraints of the UK Numbering Plan (also known as the Specified Numbering Scheme) and information received by Oak Telecom Ltd relating to tariffs.

Chapter Two

INSTALLATION

2.1

Hardware Requirements

The following are the minimum required PC specifications to run Advance Classic Call Management System software.

Microsoft Windows 95

Intel Pentium 166 MHz
32 MB RAM
1.6 GB Hard Drive
VGA Colour Monitor
2 COM Ports (Mouse + PABX Connection)
Mouse/Pointing Device

N.B. If you intend using DCS Call Centre, your machine will need a PS/2 Mouse and 2 free COM ports

Microsoft Windows 98/98SE/Me

(O/S stability may compromise reliable operation of Classic)

Intel Pentium 266 MHz
64 MB RAM
3.2 GB Hard Drive
XVGA Colour Monitor
2 COM Ports (Mouse + PABX Connection)
Mouse/Pointing Device

** Please see notes on page 2.4 - Oak Telecom have reservations on the suitability of Windows 98 versions as an operating system. Windows 98 may not be suitable for running an application such as Call Management 24 hours a day, 7 days a week.*

N.B. If you intend using DCS Call Centre, your machine will need a PS/2 Mouse and 2 free COM ports

Microsoft NT4 or Windows 2000

Intel Pentium 266 MHz, Pentium Pro 200 or Multi-processor
64 MB RAM
6.4 GB Hard Drive
XVGA Colour Monitor
PS/2 Mouse
2 COM Ports (Mouse + PABX Connection)

Software Requirements

The PC does not need to be dedicated to the task of telecommunications management, but it must be born in mind that the machine will be collecting telephone call information from the telephone system all the time. This task only requires a little of the personal computer's power so it should not impact on existing programs when they are being used, **however this does not apply when programs are loading.**

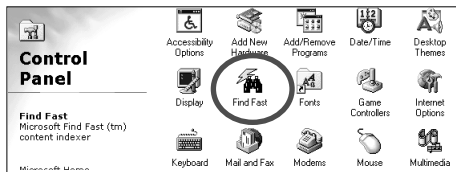
Some third party programs completely disable the computer when they load, or occasionally when they run. During these periods nothing else at all is allowed to happen. Even the collection of telephone call information, which uses sophisticated interrupt driven communications routines, is disabled. These time-outs are *normally* very short, perhaps 1 second or less, however some Windows applications (for example Microsoft Office) can take up to 20 seconds to load. If any interruption of this nature were to occur, call data will almost certainly be lost.

As noted on page 2.3, the computer operating system must be either **Microsoft Windows 95/98/Me** or **Microsoft NT4/Win 2000**. We do not recommend the use of either Windows 3.1 or Windows for Workgroups (3.11) and currently have **reservations** on the suitability of **Windows 98** versions as an operating system.

Note for Windows 98 Users: -

Please ensure machines running Windows 98 do not have 'Scandisk' or 'Defrag' set to run under Windows 'Task Scheduler' as this will cause serious problems, and may result in the computer 'hanging' or failing to collect or convert call data!

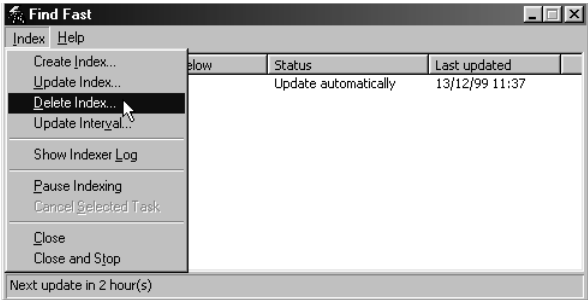
If the computer is running Microsoft Office, the 'Fast Find' utility must be uninstalled or disabled, as this is known to cause problems with call data collection. 'Fast Find' periodically scans the hard disk (at scheduled intervals) to build an 'Index' of Office Documents on each fixed drive. While this 'indexing' is running, 'Collected' call data may not be written to disk.



'Fast Find' is located in the 'Control Panel' and double-clicking the 'Fast Find' icon...

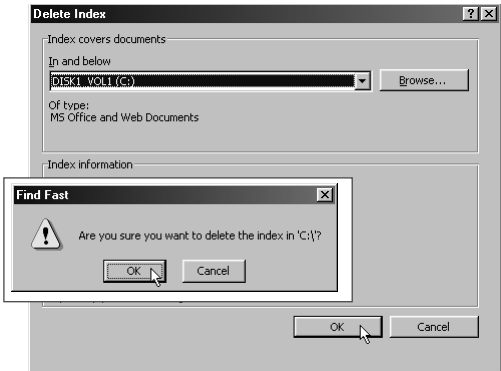
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...opens the **'Fast Find'** window. The user highlights the **'Index'** in the pane, then click **'File'** and selects **'Delete Index...'** from the menu. Clicking this option opens...



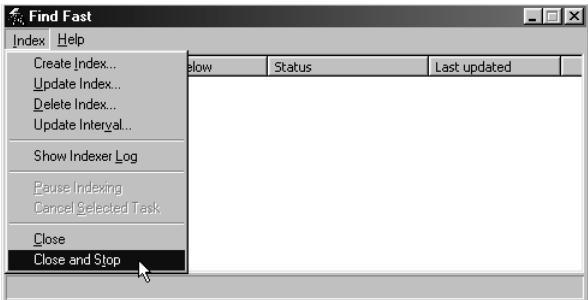
2.5

...a **'Delete Index'** window, showing the selected **'Fast Find Index'** listed in the text-box. The user clicks the **'OK'** button which opens an **'Are you sure'** window. To complete the deletion, the user selects the **'OK'** button. This process must be repeated to remove all **'Indexes'** held in **'Fast Find'**.



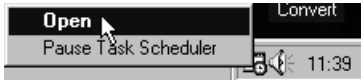
When the pane is empty, the user opens the **'File'** menu and selects the **'Close and Stop'** option to prevent any further activity by **'Fast Find'**.

Please consult your System Administrator or Windows **'Help'** for further details.

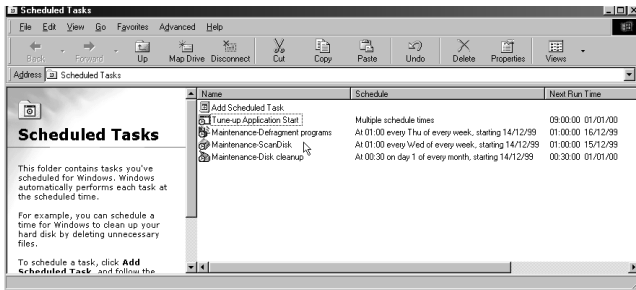


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Please ensure machines running Windows 98 do not have '**Scandisk**' or '**Defrag**' set to run under Windows '**Task Scheduler**' as this will cause serious problems, and may result in the computer 'hanging' or failing to collect or convert call data!



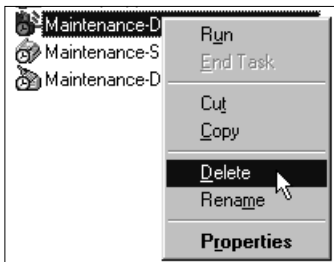
To check the settings of the '**Task Scheduler**', you double-click the icon (far right on the Task Bar), right-click and select '**Open**' from the menu or select '**Scheduled Tasks**' from '**Start | Accessories | System Tools**', to open the window.



The option marked '**Tune-up Application Start**' is automatically created by Windows 98 during the O/S install. Any other tasks were probably set up under the '**Maintain Your Computer**' section of '**Welcome to Windows 98**', which runs when the machine is first started under Windows 98. If the default settings of the '**Maintenance Wizard**' were used, the following 'housekeeping' tasks would have been created: -

- **Maintenance-Defragment programs**
- **Maintenance-ScanDisk**
- **Maintenance-Disk cleanup**

Whilst the 'housekeeping' tasks are very useful to keep the hard disk running at maximum performance, they may well have a detrimental effect on both the collection and conversion of call data!



To ensure trouble-free call data collection and processing, the safest option would be to remove these tasks and advise the user to run them manually. This should be undertaken during periods when the Call Logging can safely be closed down, with minimal data loss. As soon as the disk utilities have run successfully, the Call Logging can be re-started.

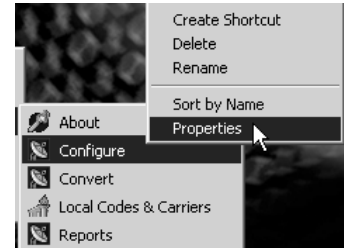
To remove the '**Tasks**' in Scheduler, you right-click on the entry and select '**Delete**' from the context-sensitive menu.

Running under NT4 or Win2000

If you are installing Classic under NT4, Windows 2000 or Windows XP, we strongly recommend the application is set to **'Run in separate memory space'** to ensure problems with other 16-bit software cannot affect the proper functioning of the Call Management software.

Under the NT operating systems (NT4 & Win2000), all 16-bit applications are run under a single 'task thread' in the computer. This can result in one application affecting others running in the same memory space.

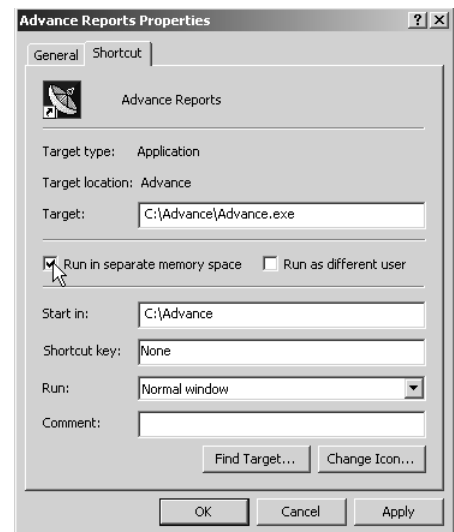
To configure Classic to run in a separate memory space, you select the **'Advance'** shortcuts under **'Start | Programs | Advance Classic'** and right-click the mouse to invoke the context-sensitive menu.



You select the **'Properties'** option at the foot of the menu and then click the **'check-box'** against **'Run in separate memory space'**. You now click the **'Apply'** button followed by **'OK'** to close the **'Properties'** setting window.

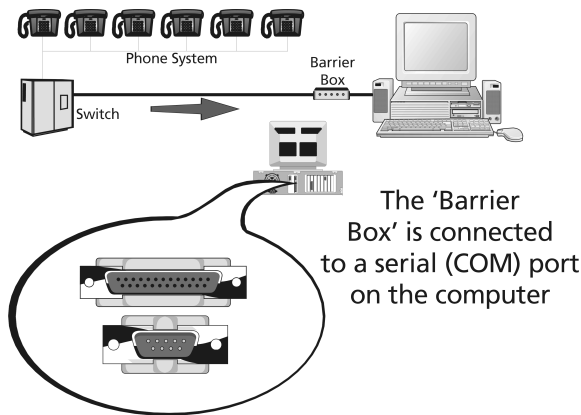
If you are installing under **Windows 2000**, **'Run in separate memory space'** may well have been set by default.

'Shortcuts' from **'Advance Classic'** on the computer desktop will also have to be set in the same way as for the main shortcuts on the **'Start | Programs'** menu.



Connecting the computer

The connection of your telephone switch to the computer running the Advance software would normally be carried out by one of our engineers or possibly your telephone system maintainer.



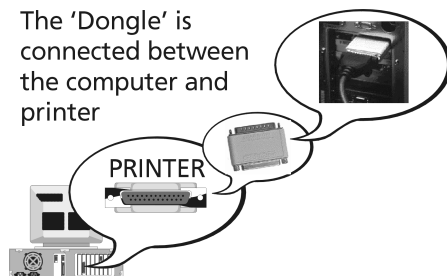
The switch must have its **SMDR** (call logging) output enabled, which would normally be carried out by your system maintainer, as it usually requires programming of the phone system.

The call logging output from the switch is normally via an **RS232** port (a 9-pin or 25-pin connector); however, some systems use a proprietary connector. The output port is connected to your computer via a special link cable supplied by Oak Telecom. This connection cable incorporates a '**Barrier Box**' which isolates the switch from the computer.

This ensures that power surges in either the switch or computer do not damage the other.

Although the '**Barrier Box**' has been found to be most effective, *it will not prevent damage being caused by a direct lightning strike!*

Connection to the computer is made via a '**Serial**' connector (**COM** port). These can be **9** or **25-pin** (see illustration).



The standard connecting cable supplied by Oak is 3 metres. If the run is any longer, special provision will have to be made. If the run length is excessive (over 20 metres), line drivers may be needed (please consult Oak). See page 6.13 for further information on RS232 connections and page 7.4 for details of various switch-to-computer cable variations. Please consult with your phone system installer or maintainer if you are in any doubt. The other connection which must be made is the software protection '**Dongle**'. This connects between the computer and printer, or sits in the **printer port** if no local printer is attached.

Installation Procedure

The **Advance Classic CMS** can be installed on machines running **Windows 95/98** or **NT4/Win 2000**. For the step-by-step details of software installation, please turn to page 2.10. Before commencing the process, please make sure that any applications running on the system are closed down.

The first step you need to take is to ensure the PC boots without errors and does not hang at the password stage. In cases where the computer being used is connected to a network, the password can present problems. In the event of a power failure, a modern PC will hang, due to Windows not having been properly closed down. The system will want to run '**Scandisk**', but without confirmation, the machine will hang. The same will occur at the password entry stage. Whilst the computer is in a 'hung' state, no call data will be collected or processed!

Your system administrator could use a commercial utility to provide automatic '**Scandisk**' and **password** entry, so that in the event of a power failure, the computer would automatically re-start fully.

*Please ensure machines running Windows 98 do not have '**Scandisk**' or '**Defrag**' set to run under Windows '**Task Scheduler**' as this will cause serious problems, and may result in the computer 'hanging' or failing to collect or convert call data!*

Directories Used

C:\ADVANCE - Programs & ini files.

C:\ADVANCE\DATA - Data files.

C:\ADVANCE\sitename - Telephone calls for selected site.

C:\ADVANCE\DEMO - Sample call data (the 'Bristol Office') - **delete this folder before collecting or processing call data for the user's site!**

C:\ADVANCE\DRIVERS - Dongle drivers

C:\ADVANCE\REPORT - Example reports

All the software and files are placed in the main **ADVANCE** directory. **Advance Collect** and **Advance Timer** both have shortcuts placed in the **Startup Group** of your system. This is necessary because both these applications must be running constantly for the system to function correctly. If the machine has to be re-booted for any reason, '**Collect**' and '**Timer**' will automatically be re-started.

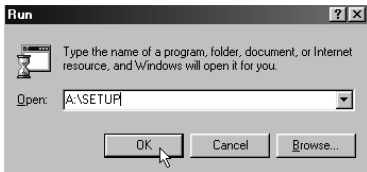
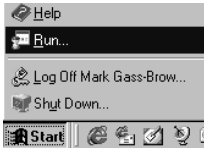
INSTALLATION

Installing Software

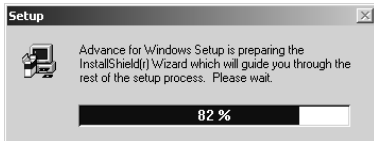
Before starting the installation process, please make sure any applications running on the computer are shut down.

Insert disk number 1 in the floppy drive, click the **'Start'** button on the toolbar and select **'Run'**, or insert the **CD-ROM** into the drive. If the CD does not **'autorun'**, double-click the **'Setup'** icon by browsing in **'My Computer'**

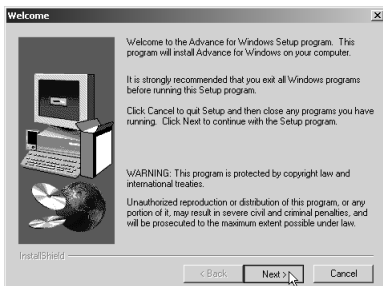
2.10



Enter **'A:\Setup'** in the box and click on the **'OK'** button. The installation wizard will now prepare the computer for the installation process.



Progress is shown by a bar-graph on screen.



Once the installation wizard has completed its preparations, the **'Welcome'** screen is displayed. To continue the install, the user clicks the button marked **'Next'**.

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The wizard looks on the system for details of the user name and company. If these are present, they will be shown in the two boxes. If these are blank, please enter your details, using the **'Tab'** key to move between the fields. The **'Serial Number'** can be found on the front of the diskette labels. When you have finished this section of the install process, click on the **'Next'** button.



2.11

The next window, **'Installer Information'** contains details of the Install Engineer's **'Name'**, the name of the **'Company'** performing the site installation and the **'Site ID'**. This is the **'Job Number'**, located in the top right-hand corner of the **'Work Report'**. This will normally be a **six-digit** number starting with **'9'**. When this information has been entered, clicking **'Next'** opens....



...the **'Choose Destination Location'** window. You are strongly advised to accept the default setting, which is **'C:\ADVANCE'**. Clicking **'Next'** accepts the default folder (directory) for the Advance Classic software.

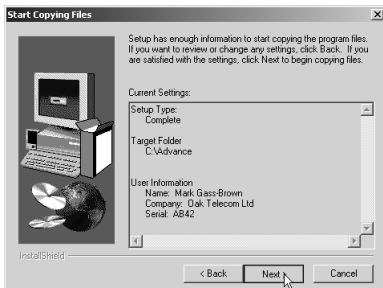


INSTALLATION

2.12



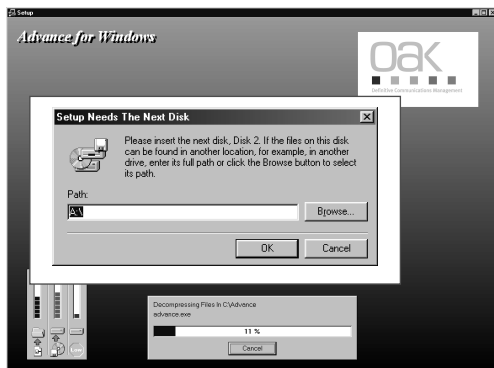
The '**Select Program Folder**' window selects into which group the application shortcuts will be placed in '**Start | Programs**'. The user is strongly advised to accept the default setting.



Clicking the '**Next**' button opens the final window of the wizard, prior to the software being loaded onto the system.

If you are satisfied that all the settings are correct, then click the '**Next**' button. If you need to make any changes, clicking the '**Back**' button will move you back through the windows one at a time.

When the '**Next**' button has been pressed, the installation wizard will start installing your Advance Classic software.



The progress of the software installation is shown on the bar-graph at the foot of the screen.

If the install is being performed from floppy diskettes, you will be periodically prompted to insert the next disk (see inset picture).

Place the next disk of the set in the floppy drive and click the '**OK**' button.

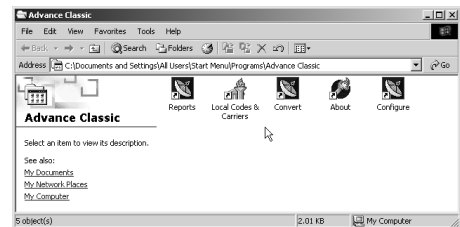
INSTALLATION

When all the disks have been loaded onto the computer, the **'Setup Complete'** window is displayed. **Do not** click in the **'Yes, Launch the program file'** check-box with the mouse cursor to activate it (shown by a ☒ in the check-box) until the set-up and connections to the computer are completed. Click the **'Finish'** button to close the installation wizard.



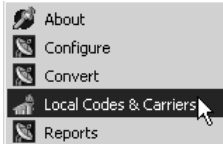
2.13

When the installation wizard closes, the **'Advance Classic'** program group will be visible on the Desktop. To close this window, the user clicks the **'X'** (Close) button in the top-right of the window.

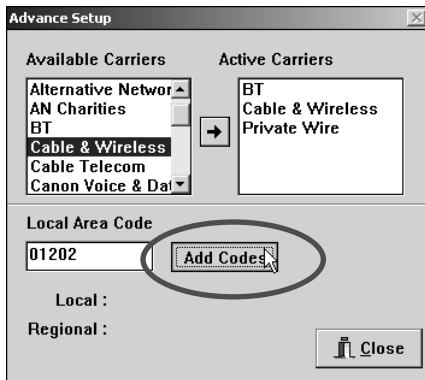


Adding Carriers and Codes

2.14



The next step is to run the '**Local Codes & Carriers**' program ('**Advance Setup**' window), select the '**Active carriers**' and insert the relevant local and regional dialling codes for your site.

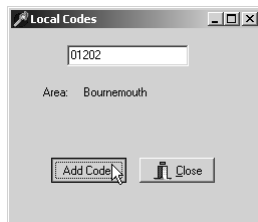


The first step is to set the call Carrier, using the '**Available**' and '**Active Carriers**' boxes. The default carriers are BT and Private Wire. To add to the '**Active Carrier**' pane, you highlight the name of the carrier in the '**Available Carriers**' pane and use the '➔' button to move the entry into the '**Active Carriers**' pane.

Advance needs to be able to discriminate between 'normal' (National) STD codes and those which are treated as '**Regional**' and '**Local**'. This process is started by entering the local code in the '**Local Area Code**' box in the lower section of the '**Advance Setup**' window. When the local STD number has been entered, clicking the '**Add Codes**' button starts the process. Although

Advance contains details of most STD code '**Local**' and '**Regional**' numbers, in some cases the '**Regional**' numbers may not be listed, or in very rare cases, neither category is listed.

When the '**Add Codes**' button is pressed, the number of '**Local**' and '**Regional**' numbers added to the '**Local Area Code**' entry in the Advance Setup (Configure) module are shown against the appropriate heading. If no figure is shown against either '**Local**:' or '**Regional**:', then these codes need to be entered manually...

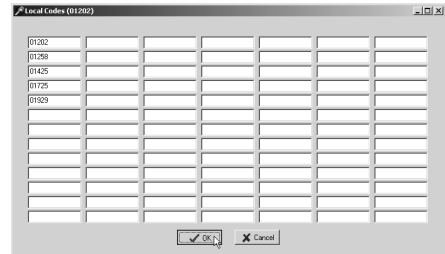


... using the '**Local Codes**' utility applet ('**LC.exe**'). The local and regional codes for the site can be found under '**Call Charges, Local and Regional Call Lists**' of the BT Phone Book for the area.

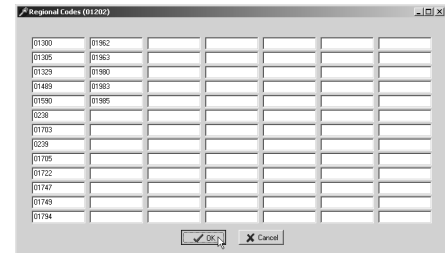
Enter your local **STD** code in the **text-box** and then click the '**Add Codes**' button.

INSTALLATION

The first window that opens is '**Local Codes**', which should have all the local codes listed, and these can be checked against the BT list. Clicking the '**OK**' button opens...

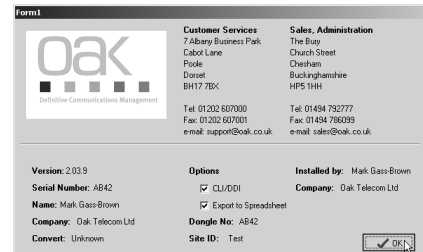
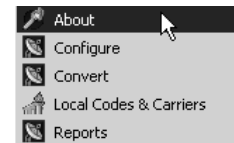


... the '**Regional Codes**' window, where the regional codes can be entered. Pressing the '**Tab**' key at the end of the code entry moves the cursor into the next empty box. When all the regional numbers have been entered, clicking the '**OK**' button will complete the task and close the '**Regional Codes**' window. Click the '**Close**' button to close the '**Local Codes**' window.



The user can check the components installed using the '**About**' utility, which shows: -

- **Customer Services Details**
- **Sales & Administration Details**
- **Software Version**
- **Serial Number**
- **User's Name and Company**
- **Convert Version**
- **Options Installed**
- **Dongle number**
- **Site ID**
- **Installer's name**
- **Installation Company**



Before the machine can be closed down and re-started, a few basic **connections** need to be made and **configuration** details entered into **Advance Setup**. The next step is to check the physical connection between the PC and the switch data port. Please turn to page 2.16 for details.

INSTALLATION

The following steps need to be taken to complete the installation and configuration of Advance Classic Call Management System software: -

- Check the output of the switch, using '**Hyperterminal**' (supplied in Windows Accessories) or a similar program. Make a note of the settings for the **COM** port. Most modern phone systems output at 9600 baud, 8 data bits, 1 stop bit and No parity. If the switch is a Realtis or iDX switch, the output will not be readable. Settings will have to be obtained from the Switch Maintainer.
- Run **Advance Setup** ('**Advsetup.exe**') and have a look at the demo data to see how the site should be set-up, *then delete the demo folder* and set up site details, data format, port settings, etc. The site details need to be entered to ensure that when **Advance Collect** starts writing to a file, the data is placed in the right directory.
- Run the data collection program **Advance Collect** ('**Adv_coll.exe**') and look at the '*.COL' file to check that the data being collected is readable.
- Re-boot the PC and restart Windows to check that data collection (**Advance Collect**) restarts OK.
- Test the manual conversion of data. Before you start '**Advance Convert**', please ensure the **Site**, **Switch**, and **Data Directory** details are correct. Start '**Advance Convert**', and when the application has initialised, it offers a choice of '**New**', '**All**' or '**Selected**'. If no selection is made, **Convert** will automatically run all '**New**' 'Col' files in the system.
- Set up the printer to be used for printing reports via Advance Classic. See page 5.13 for details of printer set-up.
- Start **Advance Classic** and run '**Cost Itemised by Time**'. Check the dialled numbers to see whether digits need to be stripped from the recorded number (for example, digits used to access a carrier, or give line access, which are not part of the actual phone number itself).
- Set up digit translation, plus lines and carriers. Re-convert the data, re-run the report(s) until the data presentation is satisfactory.
- When everything is OK (when data collection and conversion are working properly), then the extensions, telephone numbers, accounts (telephone clients), etc. can be fully configured.
- If required, Oak are able to offer comprehensive user training at the **Oak Telecom Ltd. Chesham Training Centre. For full details please ring 01494 792 777.**

Chapter Three

CONFIGURING ADVANCE

3.1

What is Advance Configure?

The Advance Configure (or Advance Setup) module contains all the phone system details and settings, which allows the accurate reporting of the call data. For the Advance system to function properly, Advance Configure must be fully setup!

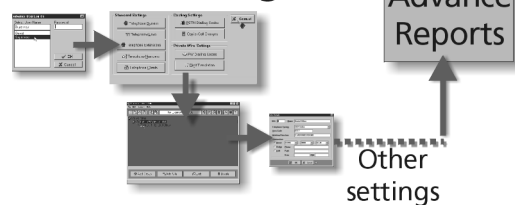
The stream of 'raw' call data from the switch would be meaningless, if Advance did not know how to interpret the information and report on it. The system needs to know: -

- The make & model of phone switch used at the site (or each site in the case of a multi-site install)
- The name(s) of the site(s)
- Where the call data is being stored on the computer
- How many phone lines come into the site or sites, and what those line numbers are
- Details of the phone extension numbers, which office or department they are in and who the extensions belong to
- What phone numbers belong to the system
- Who are phone clients (for onward call charging purposes) of the business
- What call carriers are used by the business
- What, if any, private wire systems are used by the business to route calls between different sites or locations
- Which digits need to be removed to report on the actual phone number called, where access codes are needed for call carriers, etc.

This information needs to be entered into Advance Configure (Setup) before any meaningful reporting on calls can be made. The settings within Advance Configure are divided into three groups: -

- Standard Settings - Page 3.9
- Costing Settings - Page 3.26
- Private Wire settings - Page 3.32

Advance Configure



Advance Configuration Tables

Standard Settings

The Standard Settings section deals with the basic setup of the system for the collection and reporting of telephone calls. This section is normally maintained by the end user. The Standard Setting tables are: -

- Telephone System
 - Telephone Lines
 - Telephone Extensions
 - Telephone Numbers
 - Telephone Clients
- } these should not require maintenance after installation
- } maintained by the end user

Costing Settings

The Costing Settings section deals with the maintenance of costing tables for each carrier. This section is not normally maintained by the user but full access is available to the advanced user (who has completed the Oak Telecom Advanced Training Course), for specialist or customised costing.

In the United Kingdom, the costing tables are maintained by Oak Telecom Ltd., with updates being provided as part of an annual maintenance contract.

In Europe, Oak Telecom's partners will provide this service. The Costing Setting tables are: -

- PSTN Dialling Codes
- Carrier Call Charges

Private Wire Settings

The Private Wire Settings section can be very simplistic, where calls over PW's are all considered to be free. If, however, special charging schemes are required and there is PSTN breakout, then this can become fairly complex.

The two Private Wire Settings tables are: -

- PW (private wire) Dialling Codes - not currently active
- Digit Translation

Using Advance Configure Module

All information in the setup module is entered and maintained in a uniform manner. The basic method of operation is described first and then follows a detailed description of each configuration table.

To start the setup module simply double click on the icon labelled '**Advance Configure**' on the desktop, or select '**Advsetup.exe**' from '**Start**' and '**Programs**'. The setup module will now load. The 'default' password for '**Supervisor**' is '**red**'. Use the '**tab**' key to move the cursor into the '**Password**' entry box. For full details of user and password setup, please see the '**User Access Control**' section on page 5.4.

Once the password has been entered and the '**OK**' button clicked, the '**Open Settings Table...**' is displayed.

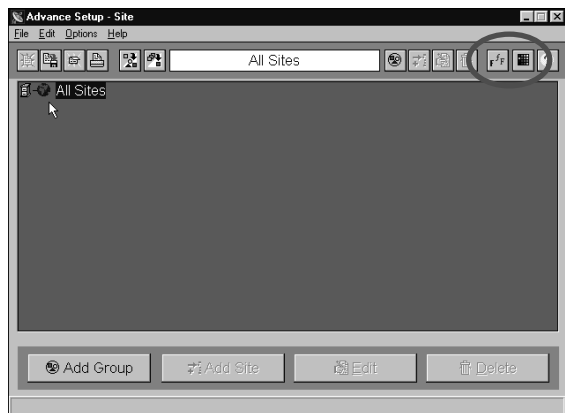
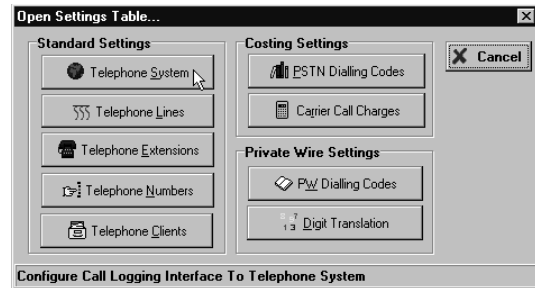
If, for some reason, the table is not visible, it can be opened by either selecting the '**File**' menu and '**Open**', or by clicking the '**Open File**' button on the tool bar. To aid easy selection of tool bar buttons, a help hint is displayed after a few moments, if the mouse pointer is held over a button.

On selecting a particular table, the large section (or pane) in the middle of the screen will display the list of items which have previously been added to a particular table. This data is held in the form of a '**tree**' and double-clicking will expand the '**tree**' by one '**branch**'.

The size of **text** and the colour of the **background** can be changed, if required, using the two buttons on the right of the toolbar (circled in the picture).

The four large buttons at the bottom of the screen aid the input and update of configuration information, once an item has been selected. The actions of these buttons are replicated both in the normal edit menu and the toolbar beneath. For the novice user, the

3.5





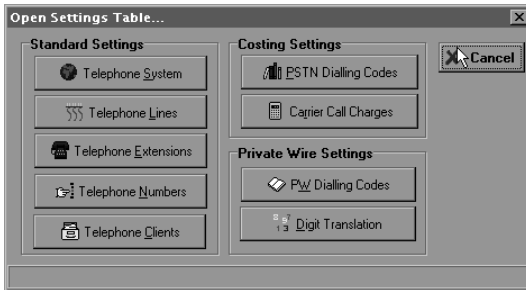
availability of large and obvious buttons is a distinct advantage.

To ensure correct operation at each stage, only the buttons and items that can be used are enabled; all other buttons, though visible, are **'greyed out'** to indicate their non-availability in this context. These buttons are **'context sensitive'** and change according to the task you are performing.

Choosing a Table



Clicking the **'Open File'** button, or selecting **'Open'** from the **'File'** menu opens the **'Open Settings Table...'** screen. The buttons are grouped together, as described earlier, into **'Standard Settings'**, **'Costing Settings'** and **'Private Wire Settings'**.



Moving the mouse pointer over any item displayed on this screen will display a help hint in a yellow box and this is repeated on the status bar at the bottom of the screen. Clicking the button will open the appropriate table.

If the item displayed is an object like a phone, but there is no filing cabinet to its left, this means that the table is currently empty. The top two **'Site'** icon screen-shots shown on the left, both have filing cabinets, indicating there are further **'branches'** in the **'tree'**.



All Sites Icon



Single Site Icon



Switch Icon

There is always one entry on the screen, showing the table function, with a description like **'All Extensions'** or **'All Lines'**. If there is a filing cabinet next to the item icon, then the table contains entries.

By clicking on the filing cabinet a drawer to the next level of filing cabinets opens and items will be displayed beneath (expanding the **'branches'** of the **'tree'**). This can be repeated until there are no further items in the selected filing cabinet.

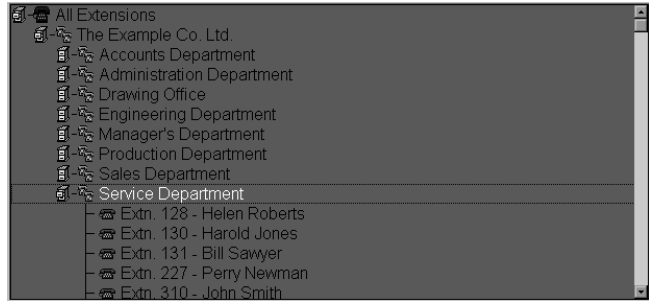
To see all the contents of the filing cabinet, simply click on the **'Expand All'** button on the toolbar, or select **'Expand All'** from the **'Edit'** menu.

To collapse the **'branch'** back into the filing cabinet, simply double click on that cabinet. To collapse the whole tree back into the first filing cabinet, click the **'Collapse All'** button on the toolbar, or select **'Collapse All'** from the **'Edit'** menu.



Expand All (left) & **Collapse All** buttons

The screen shot on the right shows an **'Extension Details'** table fully expanded (the Bristol Office, which is provided for demonstration purposes). The **filing cabinets** can be seen where further **'branches'** of the **'tree'** exist, but not against the individual extensions in the Service Department. The **scroll bars** down the right hand side of the screen allow the selection of items not currently visible.



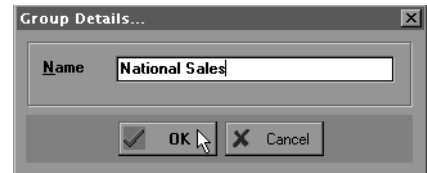
3.7

Add Group

The **'Add Group'** button allows for the insertion of a new group. The grouping of items is normally carried out for reporting and selection purposes. If, for example, there were ten sites to be monitored but six belonged to Company A and four to Company B, then these could be set up in two groups and reports run for them separately, by selecting either the Company A group or the Company B group.



The most common use of grouping is for extensions within a company. Extensions are usually grouped together because they belong to the same department, division, cost-centre, office, etc. When reports are run, accumulated totals are shown both for the extension and the group.



Clicking the **'Add Group'** button opens a **'Group Details'** box. Simply enter the name of the new group (in this example **'National Sales'**) and click the **'OK'** button.

Extensions can be moved from one group to another, simply by **'dragging and dropping'**. Click on the extension to be moved with the **left mouse button** and, whilst keeping the button **held down**, move the extension over to the new group. As soon as the mouse button is released, the extension will be moved to the new group!

Add Item

3.8

The **'Add Item'** button (which is context sensitive and will change according to the current table open) allows individual items to be added to a table, such as a site's details or perhaps the name of a person on a particular extension number.

For example, to add an extension, click the **'Add Extn.'** button, which opens the **'Extension Details'** box. When all the details have been entered, clicking the **'OK'** button closes the box.

All the **'Add Item'** buttons (e.g. Add Site, Add Line, Add Account, etc.) work in the same way. Clicking the button opens a **'Details'** box which is specific to the table being used.

Edit

Whether a group or item is selected on the display, the edit button will display the contents of the selected item and allow it to be edited.

Clicking the button opens exactly the same **'Details'** box used with the **'Add'** button except, of course, the box now contains details of the selected item. Once the necessary amendments have been made, click the **'OK'** button to close the box.

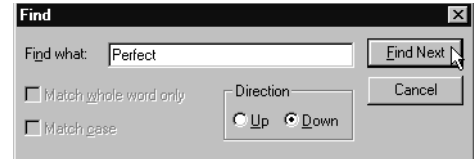
Delete

Whether a group or item is selected on the display, the delete button will allow it to be removed. A warning message is displayed to confirm that the user wishes to proceed with the deletion. If a group is selected for deletion, then all of its items and sub-items will also be deleted, so be very careful.

To perform a deletion, select the item and click the **'Delete'** button. A **'Warning'** box is displayed and the item will only be deleted if the **'Yes'** button is clicked. If **'No'** is clicked, then the table will not be altered in any way.

Finding a 'table' entry

To assist the user to locate entries within any **'Table'**, a **'Find'** facility is included. To use this, select **'Find'** from the **'Edit'** menu, or use the keyboard shortcut **'Ctrl+F'**. This feature can be used to locate text or numbers. The user simply enters the character string to be located (within the **'Table'**) in the **'Find what'** box then clicks the **'Find Next'** button to perform the search. The two radio buttons in the **'Direction'** box dictate the direction of the search. This facility is only of relevance if the 'table' to be searched is very extensive and the computer slow.



3.9

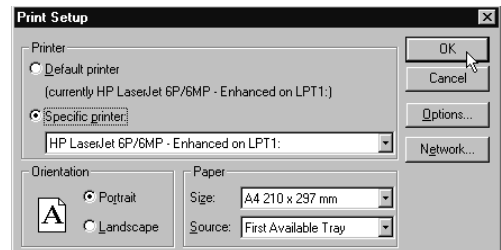
Sorting Tables

The default presentation of table data can be changed by selecting **'Sort'** from the **'Options'** menu. This facility enables the user to change the table order from numerical to alphabetical and vice versa.

Printing a 'Table'

Any 'table' within Advance Configure can be printed to paper output if required, but the one most likely to output in this form would be **'Telephone Extensions'**.

Prior to using the **'Print'** feature, the user is advised to set-up the printer, unless this has already been done. To do this, the user selects **'Print Setup'** from the **'File'** menu, which opens the **'Print Setup'** window. This window enables the user to select: -

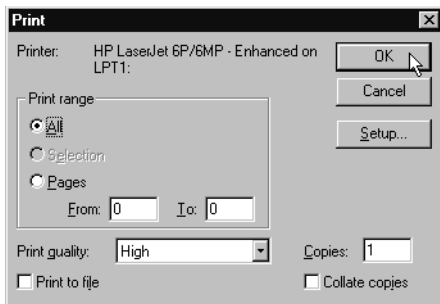


- **'Printer'** - either **'Default'**, **'Specific'** printer or a **'Network'** unit
- **'Orientation'** - of the printed output (either **'Portrait'** or **'Landscape'**)
- The **'Paper'** **'Size'** and **'Source'**, via **drop-menu** boxes.
- **'Options...'** for the printer settings. These are specific to the printer being used and are part of the printers own settings software.

To **'Print'** a **'table'** the user either clicks the **'Print'** button on the toolbar, selects **'Print'** from the **'File'** menu or uses the keyboard shortcut of **'Ctrl+P'**. Depending on the **'Table'** open, the user will either go straight to the **'Print'** window or in the case of the **'Telephone Extensions'** table, an **'Extension Print Option'** window.



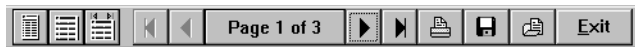
The user can select to have the extensions printed either in **'Grouped'** order or **'Numeric'** order. Extensions which are sorted under **'Grouped'** will be listed in **numeric** order within each group.



The main **'Print'** window allows the user to select what should be printed, (for example **'All'** pages or **'Selected'** pages), print quality, the number of copies to be printed, etc. The **'Print to file'** option is presently non-functional.

Print Preview

Advance Configure offers the user a **'Print Preview'** option (**'Print Preview'** from the **'File'** menu) which allows the user to preview the information prior to printing. As with the normal **'Print'** option, if **'Print Preview'** is selected from the **'Telephone Extensions'** table, the user must firstly choose output in **'Grouped'** or **'Numeric'** order.



'Print Preview' opens showing the first page of the print, with a toolbar across the top of the window. These buttons

enable the user to navigate their way around the print document, in addition to printing, saving and loading.



The three buttons to the left of the toolbar control the on-screen view of the print document. The buttons (from left to right) are: -

- **Fit in Window** - shows the full length of the page.
- **100%** - the page is shown actual size on screen. For A4 paper in portrait mode, this does not quite fill the screen. The user can

move up and down the page using the **scroll-bar** on the right of the window.

- **Page Width** - the page width completely fills the screen. The user can move up and down the page using the **scroll-bar** on the right of the window.

The next four buttons on the toolbar are used to navigate around the pages. The text message in the centre of the buttons informs the user how many pages the print document contains, and which page is currently on view. To either side of this 'message' are two pairs of buttons. The first single arrow moves through the print document one page at a time, whilst the arrow with the bar '>|' or '<|' moves directly to the either the **last** or **first** page of the print document.



3.11

Clicking the **'Print'** button runs the printing of the document visible on-screen, using the print configuration setting within **'Print Setup'** (see page 3.9). The print document remains on-screen through and after the printing process.

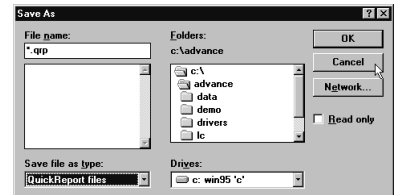


The **'Save'** button opens a **'Save As'** window. Please note, the print document can only be saved in **'QuickReport'** (*.qrp) file format. This file type can be viewed in Advance Classic or using Inprise or Borland Report Smith software.



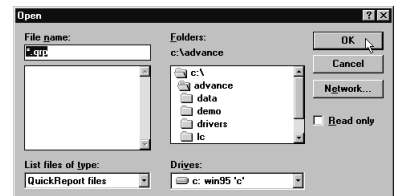
When the **'Save As'** window opens, the user selects the **drive** and **folder** (or directory) where the print document needs to be located, and gives the file a name. As noted above, the file can only be saved in 'qrp' format (i.e. the file-name must have a QRP suffix).

Saved QRP files can be opened and printed at any time using Advance CMS by clicking the....



....**'Load report'** button. This facility enables users to retrieve any previously saved QRP files. Clicking the button invokes an **'Open'** browser window, which is used to locate the desired file.

The final button on the toolbar is **'Exit'** which closes the **'Print Preview'** window, and returns the user to the Advance Configure main window.



Changing the screen defaults

The user is offered the option of changing the default fonts and background colour used by Advance Configure. The standard font used is the san-serif TrueType windows font 'Arial'.

The user can chose an alternative by clicking the '**Font**' button. The number of font options available will depend on what fonts were supplied and loaded during the initial Windows or NT install and if any extra fonts were added to the system.

The installed fonts are listed in the left-hand pane, and can be browsed using the scroll-bar. The effect of selecting a different font can be previewed in the '**Sample**' window (circled in the screen-shot).

The central pane lists the **style** variations of the selected font, which would usually be **Italic**, **Bold** and **Bold Italic** in addition to **Regular**.

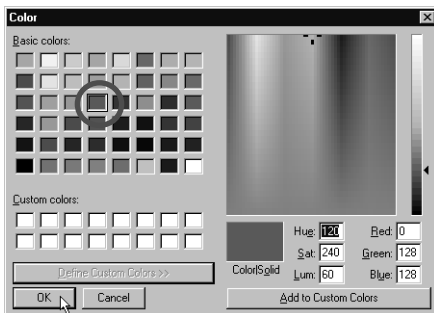
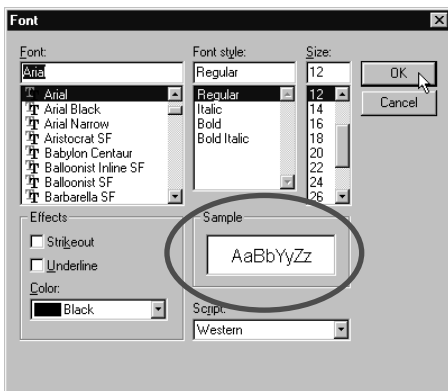
The last pane controls the '**Size**' (in points) of the display font being used. The default setting is 12-pt which should prove a satisfactory all-round choice. There may be occasions when either a larger or smaller font were more suitable. The user is free to experiment, however

it is worth taking a note of the default setting (12-pt Arial regular black).

In addition to changing the display font, the user can also change the background colour for the Advance Configure window (by clicking the '**Change Background Colour**' button). The default setting is the standard colour Teal, which is a blue-green and one of the 16 basic windows colours. The screen-shot of the '**Colour**' window shows the '**Define Custom Colors**' pallet expanded. The choice of background colour is only limited by the display properties of the system running Advance CMS.

The default Advance Configure window background is shown circled in the screen-shot.

3.12



Standard Settings

TELEPHONE SYSTEM

For each site that will be monitored by Advance, an entry will need to be made in the **'Telephone System'** table. For many installations this will just be a single entry made when the Advance system is installed.

The site entry example shown is for the directly connected site of a company based in Bristol, England (the demonstration data provided with the application). We have called the group which our site belongs to 'The Example Co. Ltd.'

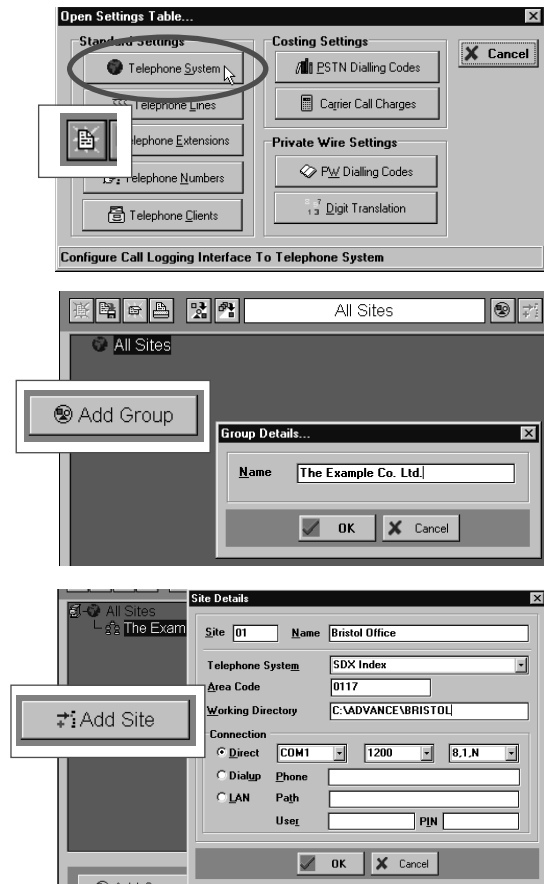
To open the **'Telephone System'** (or 'Site Table') click the **'Open File'** button and select **'Telephone System'** from the **'Open Settings Table...'** window.

With an empty table, the only option available is **'Add Group'** (the only active button at the base of the window). When the **'Add Group'** button is clicked, a **'Group Details'** box opens, where the name of the company is entered. Enter the name in the text box and click the **'OK'** button to close the **'Details'** box. The new group will now appear under the **'All Sites'** icon.

A filing cabinet has now appeared alongside **'All Sites'** in the screen-shot, indicating a 'branch' on the 'tree'.

Now that the table contains an entry, highlight (select) **'The Example Co. Ltd.'** entry in the table and all four buttons along the bottom of the window will become active.

To add a **'Site'** to the table, select (highlight) the group which the new site will come under and click the **'Add Site'** button. This opens the **'Site Details'** box.



Site

Site

Each site must have a unique number in the range of 1 to 9999. This code is stored as part of each processed call record to identify which site the call belongs to. In the case of a single site, it is recommended that a site code of '1' be used. If your company has more than 10 sites, then it is advisable to prefix sites 1 to 9 with a 0.

Once a site code has been allocated, we strongly recommend that this site code remains unchanged, once the system is in operation.

This is the only place where site numbers can be seen, as in all other places throughout the Advance system, a list of site names is displayed.

Name

Name

This name will appear on reports. It can be up to thirty two characters long and, as mentioned earlier, this is the name that will appear for site selection or allocation.

Telephone System

Telephone System

Area Code

Working Directory

Connection

☒ Direct

Each type of telephone system has its own unique call logging output. The correct name must be selected from the list that matches the type of telephone system being used. Selecting the wrong telephone system will result in misreporting of call logging data. Reports run on this data will either show 'nonsense' or simply be blank.

An incorrect selection should not affect the collection of telephone call data. If an incorrect selection is made, it can be changed later and the collected telephone calls re-processed for the correct telephone system.

To select a system, click the '**down-arrow**' on the right of the box (circled in the screen-shot). The '**drop-box**' lists all the phone systems Advance works with. Use the up and down arrows on the '**scroll-bar**' to locate the switch being used at the site. Clicking on the **switch name** with the mouse will select it.

Area Code

Area Code

The user's local STD code will need to be entered here. For example the area code for Bournemouth is 01202. This is used for costing purposes to determine which calls are local, which are regional, and

which are national. If this is not set correctly then some telephone calls will most likely be charged at the normal national rate, as opposed to a lower local or regional rate.

Working Directory

Telephone calls collected from the telephone system will be stored in a selected working directory on the computer's hard disk. This would normally be on the same drive as the software such as '**C:\ADVANCE\BRISTOL**'. Each site needs to have its own unique directory, and it is advisable to restrict the directory name to 8 characters.

Call data could be stored on a network drive such as '**V:\SERVER\TELECOM\SITES\BRISTOL**' if required. In situations where the storage is not on a local drive, a failure of the Local Area Network will almost certainly mean that call data would be lost. Data could be collected on a local drive and copied to a file server at the end of the day.

If call data is being stored on a network, the user will need to work closely with the '**Network Administrator**' to find the best solution to their particular needs.

Working Directory	C:\ADVANCE\BRISTOL
-------------------	--------------------

3.15

Connection

There are three methods of connection to enable the collection of telephone call information. The primary one is a **Direct** serial connection between the telephone system and the PC. The second one is the **Dialup** of a remote site using a modem and the third called **LAN** is presently disabled.

Connection			
<input checked="" type="radio"/> Direct	COM1	1200	8,1,N
<input type="radio"/> Dialup	Phone		
<input type="radio"/> LAN	Path		
	User		PIN

Direct

The three items next to Direct confirm which PC communications port is to be used, what baud rate (speed) is to be expected for the data being received, and the format of the data being received. The switch maintainer will normally be able to let you know about the speed and format of connection to the telephone system. As a guide COM2, 1200, 8,1,N or COM2, 9600, 8,1,N will often be close to the mark (use **Comchk.exe**-see page 2.9).

If the incorrect selection is made, either no call data or garbled call data will be collected. This call data will be of no use for running reports. In

most cases the call data stored is readable (not always obviously meaningful) if the settings are correct.

Dialup

Where a site is connected via a **Dialup** link, call data is collected by Advance in the normal way and stored on the 'remote' computer. This system is connected (via a modem) to a direct exchange line (or DEL). Your local system is also connected to a DEL by means of a modem. Once a day, normally overnight, the local computer 'contacts' the remote site and retrieves the call data for the last 24-hours.

Oak Telecom are able to supply the necessary software (**Advance Centre** and **Advance Remote**) to operate a Dialup system for remote sites.

The phone number of the modem at the remote site is entered here, along with the PIN number that is usually required to allow access for retrieval of information.

The foregoing comments also apply where a **'Reporter Box'** is being used in place of a PC to gather call data from a remote site.

LAN

This facility is currently disabled.

Once all the entries have been made in the **'Site Details'** window, clicking the **'OK'** button will complete the task.

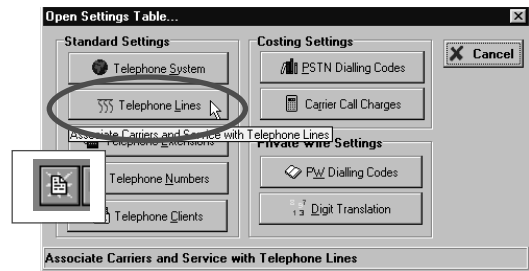
*When all the necessary configuration settings have been made, the user clicks the **'Close File'** button to exit the table, and clicks the **'Yes'** button in the **'Warning'** window to save the changes made.*

TELEPHONE LINE TABLE

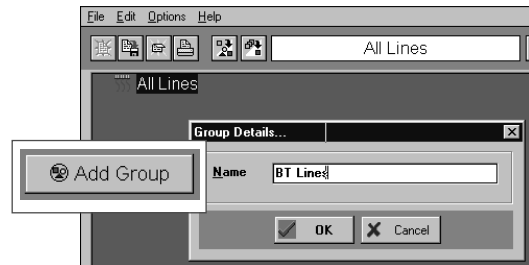
Each telephone connection to the telephone system needs to be defined for costing and reporting purposes. Without this information, Advance will use default costing for calls made on this line, in the U.K. this carrier is BT.

Sample line data is supplied within Advance Configure, which can be used to familiarise the user with configuring the software.

To open the **'Telephone Lines'**, click the **'Open File'** button and select **'Telephone Lines'** from the **'Open Settings Table...'**



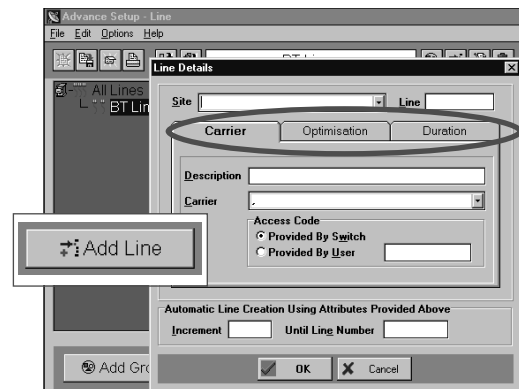
If the table is empty, the **'All Lines'** icon will not have a filing cabinet to the left of it. The only active button at the bottom of the window will be **'Add Group'**. Clicking the button will open the **'Group Details'** box, where the name of the line group is entered. When the text has been entered, clicking the **'OK'** button will close the box.



The new line group will now be visible in the table, and the **'All Lines'** icon will now have a filing cabinet alongside it.

The next step is to add a line (or lines) to the newly created group. Click the **'Add Line'** button to open the **'Line Details'** window. This contains three 'tabbed' sections (circled in the screen-shot),

- Carrier
- Optimisation
- Duration

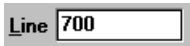


Site


 A screenshot of a software interface showing a dropdown menu labeled 'Site'. The menu is open, and 'Bristol Office' is selected.

The site to which the line is connected should be selected from the list of sites. If more than one site exists, you select it by clicking the down arrow on the right of the text-box and selecting from the list in the drop-box.

Line


 A screenshot of a software interface showing a text box labeled 'Line'. The text '700' is entered in the box.

The line number as defined within the telephone system. The switch maintainer should be able to provide a list of line numbers and what **PSTN** or **PW** connections have been made to them. This is not always easily available and may require the use of default carrier costings until some sample reports are run, which list line numbers and their use.

Carrier Page

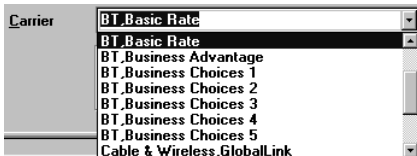
Each tab is selected by pointing the mouse at the relevant tab of the notebook and clicking on it. This page defines the normal non-optimised carrier for this line.

Description


 A screenshot of a software interface showing a text box labeled 'Description'. The text 'Main Number' is entered in the box.

This should be a meaningful description for the line. This might be the actual phone number for the line, or it might be a general name for all incoming lines like 'Main Number'. The limit to the description is 32 characters.

Carrier


 A screenshot of a software interface showing a dropdown menu labeled 'Carrier'. The menu is open, displaying a list of carriers: BT.Basic Rate, BT.Business Advantage, BT.Business Choices 1, BT.Business Choices 2, BT.Business Choices 3, BT.Business Choices 4, BT.Business Choices 5, and Cable & Wireless.GlobalLink.

The carrier that will take the **majority** or **all calls** on this line should be selected. This would normally be considered to be non-optimised call routing.

Click the **down-arrow** on the right of the text frame to access the **drop-box** listing carriers. Use the **scroll-bar** on the right to move up and down the list.

When the appropriate carrier has been located, click on the entry with the mouse to select it.

Access Code

The access code is the number normally dialled to get an outside line, like '9' or perhaps '901'. This is normally provided by the telephone system and is left blank. In rare cases this code is used for access in Private Wire usage. In this instance, the code needs to be entered as the default access code field for this line.

Access Code

☒ Provided By Switch

☐ Provided By User

3.19

Increment

It is often the case that several lines provide exactly the same services, so rather than entering each one separately, the first line can be entered and then replicated for a sequence of line numbers. Normally the line numbers are sequential, so the increment would be '1'.

Automatic Line Creation Using Attributes Provided Above

Increment

Until Line Number

Until Line Number

This is used in conjunction with the 'Increment' field above to set the final line number in the range of lines numbers being set.

Optimisation Page

This page defines whether **other carriers**, in addition to the **primary carrier** (set on the preceding tab), will be involved with taking calls to particular regions at lower cost rates. An example might be Cable & Wireless or World-Com, where national and international calls can be made at preferential rates.

To select an alternative to the primary carrier for a particular costing band, 'activate' the band by clicking the '**checkbox**' (see screen-shot). Next click the **down-arrow** to the right of the box to activate the **drop-menu** and then use the **scroll-bar** on the right of the box, to move up and down the list to locate the carrier. Clicking on the chosen entry with the mouse will select it, and close the drop-menu.

Carrier

Optimisation

Duration

Carrier,Service

☐ Local

N/A,N/A

☐ Regional

N/A,N/A

☐ National

N/A,N/A

☐ International

N/A,N/A

☐ Mobile

N/A,N/A

Carrier,Service

☒ Local

N/A,N/A

☐ Regional

ACC Access

☐ National

ACC Direct

☐ International

ACC Value Plus

☐ Mobile

ACC World

BT Basic Rate

BT Business Advantage

BT Business Choices 1

BT Business Choices 2

It is acceptable to have several carriers defined, carrying calls to the various specified regions.

The upper screen-shot of the optimisation tab shows that all calls are carried by the default carrier, because no optimisations have been selected.

Duration Page

This contains information about call set up times and the methods to be used for costing calls. The default settings on the page will be adequate for most telephone systems.

The phone system installer / maintainer will need to be consulted, so as to check the functioning of your particular switch, unless the setup was performed by an Oak Telecom engineer. The figures entered in the boxes are in **seconds**.

Dial

☒ Dial

The time to dial is included in the duration of the call provided by the switch. The estimated time to dial each digit is defined and can be modified in the light of the use of speed dialling or some other facility that minimises the time to dial telephone numbers.

Connect

☒ Connect

The time taken for the call to connect is provided within the duration for the call. The connect duration is assumed to be the value defined. This value can be modified in situations where calls may take longer to connect, such as alternative carrier selection or calls to non-digital destinations.

Ring

☒ Ring

The time taken to answer the outgoing call is included in the duration of the call. This is estimated to be the value defined. This can be modified to reflect the types of calls being made and the types of businesses which are being called.

Talk

☒ Talk

Talk indicates that the duration of the call includes the talk time once connected. Under normal circumstances this will always be set. It is also displayed on screen to provide clarity as to how the Advance system interprets the duration provided by the switch.

Cost By

Cost by

☒ Talk Time

☐ Metered Units

Cost by indicates whether some form of metering is provided to give accurate call costing, or whether the duration is to be used for costing.

Call Answered

Call Answered defines whether the call data includes any indication that a call has been answered or not, and, hence, whether a long duration unanswered call is to be costed. This indication is normally only available on digital lines and on a selected number of telephone system types.

The user may need to consult with the system installer / maintainer on this particular point. If the Advance software setup was undertaken by an Oak Telecom engineer, then this field would have been set.

When all the necessary configuration settings have been made, the user clicks the 'Close File' button to exit the table, and clicks the 'Yes' button in the 'Warning' window to save the changes made.

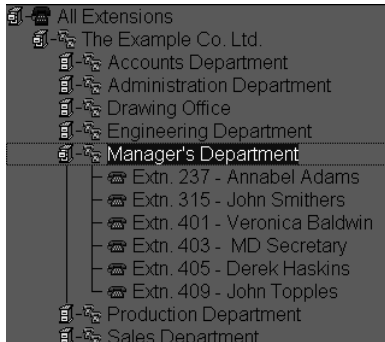
Call Answered

☒ No Indication Given

☐ Confirmation Given

TELEPHONE EXTENSION TABLE

3.22

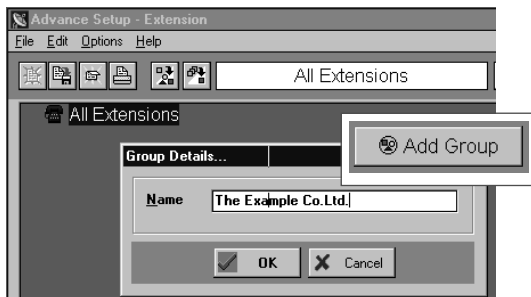
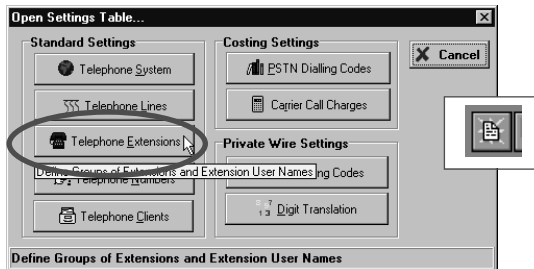


For reporting purposes, each telephone extension in the organisation should be entered onto the Advance system. When reports are built, extensions are grouped together as defined by the setup options. The organisation can be represented in a hierarchical fashion, as shown in the screen-shot on the left.

There isn't a limit to the depth to which the hierarchy can go, but it is recommended that five or six levels would be a practical and sensible limit.

Due to staff movements, the **'Telephone Extension Table'** is probably the most used component of Advance Configure. Bearing this in mind, we recommend a little time is taken to become fully conversant with the operation of the table.

To open the **'Telephone Extensions'**, click the **'Open File'** button and select **'Telephone Extensions'** from the **'Open Settings Table...'**



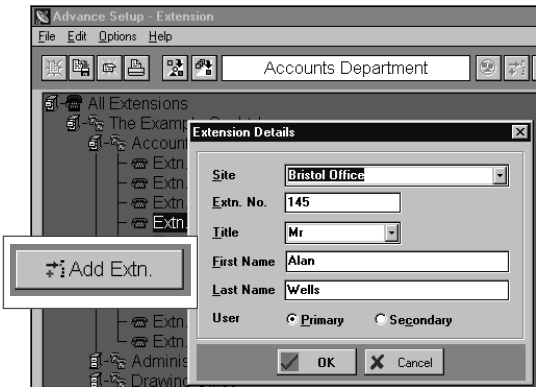
If the table is empty, the **'All Extensions'** icon will not have a filing cabinet along side it. The only active button at the bottom of the window will be **'Add Group'**. Clicking the button will open the **'Group Details'** box, where the name of the extension group is entered. When the text has been entered, clicking the **'OK'** button will close the box.

The new extension group, representing the company, will now be visible in the table, and the **'All Extensions'** icon will now have a filing cabinet alongside it.

With the company name highlighted, you can continue to use the **'Add Group'** button to add the **divisions, departments, offices**, etc. that represent the overall company structure or hierarchy.

Add Extension

Once the group or groups needed have been created, the individual telephone extensions can be added. Highlight the group and click the **'Add Extn.'** button. For each extension to be reported on, an entry needs to be made for it in the table. The screen-shot shows the **'Extension Details'** window for a Mr Alan Wells on extension 145 in the Bristol Office.



3.23

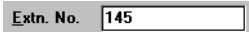
Site

Using the **down-arrow** to the right of the text box, select the site name from the list. In this example, only one site exists (Bristol Office), but in your case there may well be more than one. Select the site by clicking on it with the mouse, which will close the drop-box.



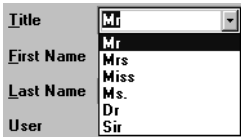
Extension Number

Enter the extension number. This is normally three or four digits, but the field has a capacity for up to eight digits.



Title

Using the **down-arrow** to the right of the text box, select the **title** from the list. You select the title by clicking on it with the mouse, which will close the drop-box. The user can type in a **'Title'**, or leave the field blank.



First Name

Enter the user's first name or their initials. Again, a blank field is acceptable. The maximum length of the entry is 32 characters.



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Surname

Last Name

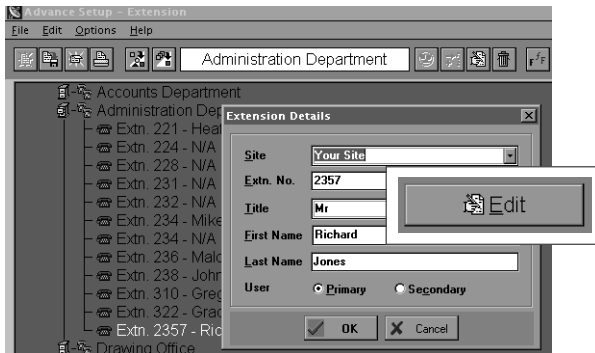
Enter the user's surname or, if this is the only name field used, the name you wish to appear in reports. This could be a room name, or a similar description to identify the extension, for example Conference Room, Reception Fax, etc. The field length is limited to 32 characters.

User

User ☒ Primary ☐ Secondary

Select either **primary** or **secondary**. Only the name of the **primary** user will appear on any extension-based reports.

Editing an Extension



If an extension entry needs to be amended, perhaps because of a change of staff, either double-click on the appropriate extension number entry, or highlight the entry and click on the **'Edit'** button towards the bottom of the window. Make any changes as necessary and click on **'OK'** when complete.

Deleting an Extension

If an entry (extension or group) needs to be deleted, highlight that entry and click on the **'Delete'** button, confirming the deletion by clicking on **'Yes'** when the warning appears.

*When all the necessary configuration settings have been made, the user clicks the **'Close File'** button to exit the table, and clicks the **'Yes'** button in the **'Warning'** window to save the changes made.*

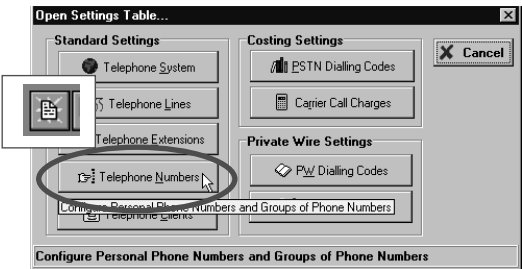
TELEPHONE NUMBER TABLE

The telephone number setup is used to perform two functions; to be able to enter specific names against phone numbers other than the default national names and to be able to group together some phone numbers that have a particular relevance to an organisation for reporting purposes. ***This feature can only be used within 'Cost Itemised' reports.***

3.25

For example, if a member of your staff has a mobile phone with number **'0973 123456'**, a **'Cost Itemised'** report of a call to that number would carry the description **'Orange'**. This table allows you to set up the person's name against that telephone number so that their name appears in an itemised report. If you have a number of members of staff with mobile phones, this table can be used to group the numbers if required.

To open the **'Telephone Numbers'**, click the **'Open File'** button and select **'Telephone Numbers'** from the **'Open Settings Table...'**



Adding a Phone Group

If the table is empty, the **'All Phone Numbers'** icon will not have a filing cabinet along side it. The only active button at the bottom of the window will be **'Add Group'**. Clicking the button will open the **'Group Details'** box, where the name of the phone number group is entered. Leave the **'Name Group'** check box **blank** if you are logged into **Advance Configure** under **'Supervisor'**. When the text has been entered, clicking the **'OK'** button will close the box.



The new telephone number group will now be visible in the table, and the **'All Phone Numbers'** icon will now have a filing cabinet along side it.

Name

This is a name to associate with a group of phone numbers. The

Name	Oak Telecom Ltd
------	-----------------

user may wish to call his naming group 'Personal Numbers' but others may be specific to their content like 'Branch Offices', 'Mobile Phones', 'Suppliers'.

Name Group

The name group **check-box** is controlled by the '**User**' logon and is specific to that user. The feature enables individual users to setup their own personal '**Telephone Number**' reporting groups. It should **never** be activated under a '**Supervisor**' logon, as this would restrict the telephone numbers being reported on for other users of the Advance system!

Once a group has been added, then phone group items can be added.

Phone Number Details

When the '**Telephone Number**' group or groups have been created, clicking the '**Add Phone No.**' button opens the '**Phone Number Details**' window.

Code

Code is the **phone number** that is to be matched up. Enter the full telephone number without any spaces (a single string of numbers).

Use Default Name

This is normally left unchecked. By checking the '**Use Default Name**' box Advance will use the normal PSTN dialling code table entry as the name, instead of one entered by the user.

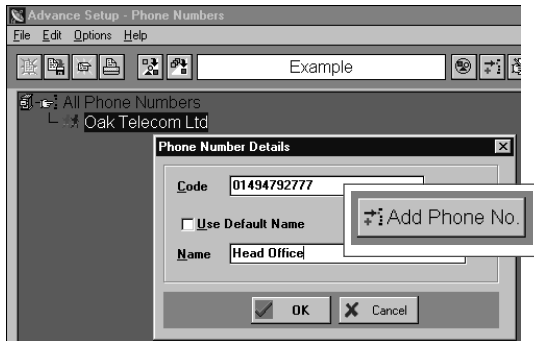
This feature is inactive if the entry is for a personal numbers entry, where the '**Name Group**' box has been checked when creating the group.

Name

This name will appear on reports if Use Default Name is not selected. The limit for this text entry box is 32 characters.

*When all the necessary configuration settings have been made, the user clicks the '**Close File**' button to exit the table, and clicks the '**Yes**' button in the '**Warning**' window to save the changes made.*

☐ Name Group



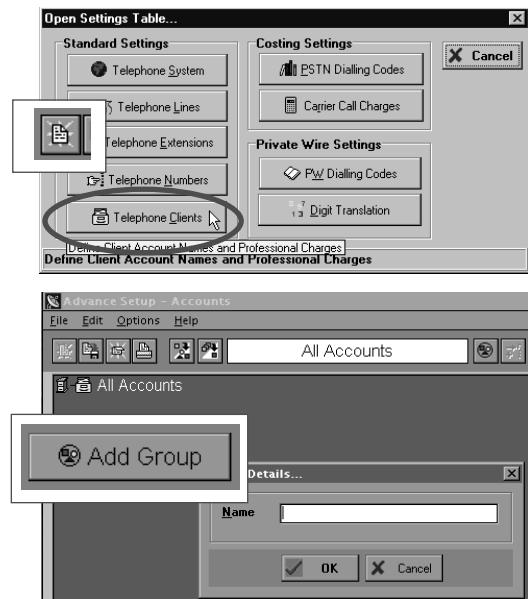
TELEPHONE CLIENT TABLE

This section of the Advance Configure program is only relevant if account codes are used in conjunction with the telephone system. This may be the case if calls are made on behalf of clients, which then need to be recharged to the client, possibly including professional charges for the time involved. The client or account code would normally be entered before or immediately after dialling a number. That code is passed, as part of the telephone call data, to Advance CMS, which will allocate that call to the appropriate client account.

This table allows a client name to be associated with each account code and apportion professional charges, if required.

3.27

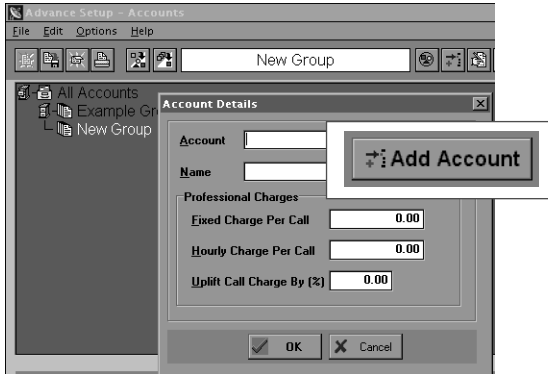
To open the **'Telephone Clients'** table, click the **'Open File'** button and select **'Telephone Clients'** from the **'Open Settings Table...'**



Highlight the **'All Accounts'** entry and click on the **'Add Group'** button. Enter an appropriate group name in the text field and click on **'OK'**.

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3.28



With the group entry highlighted, click on the **'Add Account'** button. This will bring up the **'Account Details'** window.

Account

Account

This can hold up to a 16 digit client account code. This is normally a numeric code.

Name

Name

This is the name of the client associated with the account number. This text entry can be up to 32 characters long.

Professional Charges

This group of entries allows for charges to be made to the client for calls and professional time used in making the calls.

Fixed Charge Per Call

Fixed Charge Per Call

Each time a call is made a fixed charge is accumulated. The box accepts a value in pounds and pence (£0.00).

Hourly Charge Per Call

Hourly Charge Per Call

This entry allows for the time spent on the call to be charged at an hourly charge rate. As with the previous box, the value entered is in pounds and pence (£0.00).

Uplift Call Charge By %

The call charge, as calculated by Advance can be increased (uplifted) by a fixed percentage, for example cost plus 25%, etc.

Uplift Call Charge By (%)	<input type="text" value="0.00"/>
---------------------------	-----------------------------------

When all the details have been entered, click on the **'OK'** button. Add further account codes as required, creating new groups as appropriate.

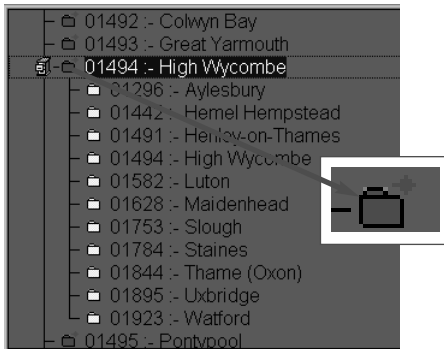
*When all the necessary configuration settings have been made, the user clicks the **'Close File'** button to exit the table, and clicks the **'Yes'** button in the **'Warning'** window to save the changes made.*

Costing Settings

PSTN DIALLING CODE TABLE

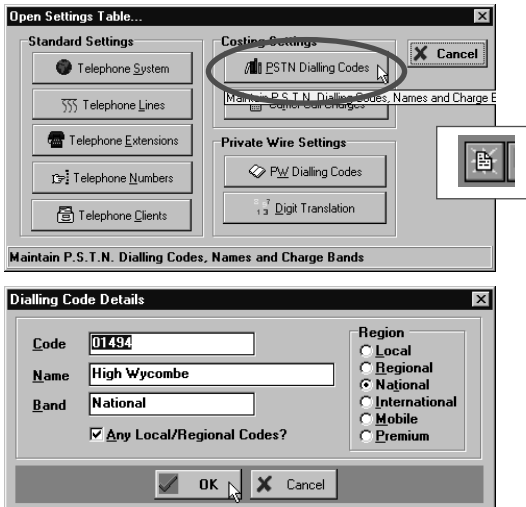
A comprehensive PSTN (Public Switched Telephone Network) dialling code table is provided with the Advance system for the United Kingdom. The table is normally arranged in numeric order.

3.30



The screen-shot shows an extract of the U.K. dialling code table. The star against folders indicates that, for a particular dialling code, there can be local and regional codes. This is true for most national dialling codes, however there are some codes, for example mobile phones, premium rate services, directory enquiries, etc. which *do not*. These are often referred to as non-geographic codes. No star appears against these and no local or regional entries are allowed.

High Wycombe has been expanded to show all the local codes which have been added to the table entry. The local and regional codes are listed in your local BT Telephone Directory.



To open the '**PSTN Dialling Codes**' table, click the '**Open File**' button and select '**PSTN Dialling Codes**' from the '**Open Settings Table...**'

Double-click on the '**All PSTN Codes**' icon to expand the table. The codes are arranged in numeric order. Use the **scroll-bar** on the right of the window to move up and down the table, or use '**Find**' facility found on the '**Edit**' menu.

Double-clicking on a table entry (High Wycombe in this screen-shot) opens the '**Dialling Code Details**' window.

Dialling Code Details

Code

This contains the PSTN dialling code. This entry can be up to 20 digits long.

Code01494

Name

This is the name associated with the dialling code destination.
This entry can be up to 32 characters long.

NameHigh Wycombe

Band

This is the name of the generic charge band associated with this dialling code.

BandNational

Local/Regional

If the (entered) code is a national number, then the option to add local and regional codes should be provided by checking this box. Do not click the check-box if the code belongs to a non-geographic type, for example mobile phone numbers, premium rate numbers and fixed rate numbers like 0345, 0645, 0845 etc. As noted before, non-geographic national codes cannot have local or regional number affiliations.

☒ Any Local/Regional Codes?

When selecting a national dialling code, the option to add local codes is provided. In this case, the local and regional dialling codes can be entered and the appropriate generic charge band entered for the lower charging rates. **The local codes will have already been configured (see page 2.8).**

Region

☐ Local☐ Regional☒ National☐ International☐ Mobile☐ Premium

To add additional local codes for your specific STD code, highlight the entry and click the **'Add Local'** button, which opens a blank **'Dialling Code Details'** window. All the **national** dialling codes which are classed as **local** calls from your STD area are to be found listed in you local BT Telephone Directory. Simply enter the **'Code'** which is the national code for that area and the **'Name'** of the area and Advance will automatically assign the **'Band'** as being local and not national. When the entry is complete, click the **'OK'** button.

All the local codes for your particular STD area will need to be checked. Any mistakes can easily be rectified by using **'Edit'**.

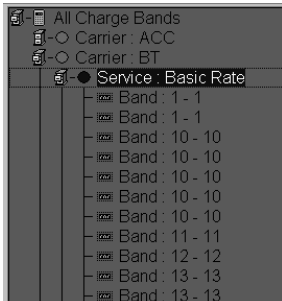


CARRIER CALL CHARGE TABLE

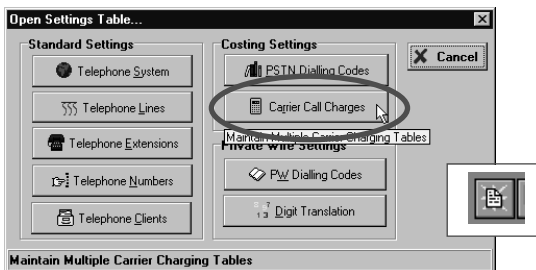
The charging tables provided by Oak Telecom Ltd. cover the most commonly used carriers. However, if your particular service provider is not included in the Advance Configure module, please contact us. In addition to a wide range of additional carriers, we are also able to supply custom tables where non-standard tariffs have been negotiated with a carrier.

Within the United Kingdom, Oak Telecom supply all the charge tables. Those for European countries are provided by our partners. In addition, there is still the option for the end user to be able to create tables or modify changes if they so wish. ***The user needs considerable experience or specialist knowledge before attempting to make any changes to the Charge Tables. We strongly recommend only Oak Telecom trained users attempt to make changes in this table.***

The charging table setup allows for each group level to have a different meaning. The top level of '**All Charges**' is, as with any other table, the 'owner' of all charge entries. The next level is the name of each carrier, followed by the name of the service at the third level. The fourth level is the item level where the charge band entries are made.



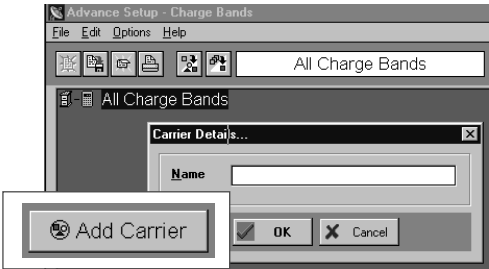
The screen-shot shows the BT Basic Rate service Charge Band table partially expanded. The charging tables use the generic (non-carrier-specific) charge bands from the PSTN dialling code table. Each carrier's charge bands can be applied to up to ten generic charge bands, thus allowing different carriers to have multiple charging routes to a destination where another may have just one.



To open the '**Carrier Call Charges**' table, click the '**Open File**' button and select '**Carrier Call Charges**' from the '**Open Settings Table...**' Double-click on the '**All Charge Bands**' icon to expand the table.

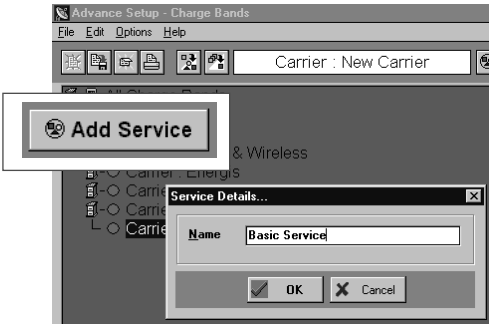
CONFIGURING ADVANCE

With only the **'All Charge Bands'** icon showing, the only button active is **'Add Carrier'**. Clicking the button opens the **'Carrier Details...'** window, where the name of any new carrier is entered.



3.33

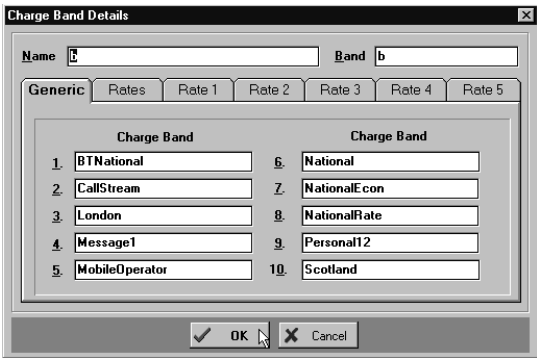
To add a new carrier, highlight the new carrier entry and click the **'Add Service'** button, and enter a name for the service.



Once a service has been created, then **'Bands'** can be added to it. With the new **'Service'** highlighted, click the **'Add Band'** button.



This opens the **'Charge Band Details'** window, which contains seven 'tabbed' pages. The screen-shot on the right shows the BT Basic Rate service band **'b'** which contains the BT National charge rate band.



ADVANCE CLASSIC - OAK

Charge Band Details

Name

The rate is given a name like DayTime, Evening, Weekend, Standard, Economy or Prime.

Name	DayTime
------	---------

Basic

There are various costing methods that can be selected.

- **None** - this call will not be charged. All other entries are ignored.
- **Fixed** - this call will be charged at a fixed cost as defined in the **Cost** field. All other fields will be ignored.
- **Connect** - an initial charge of **Cost** will be made once the call is connected. The minimum cost field will apply. **Extended** costing will then be available for the rest of the call duration.
- **First** - a **variable** charge for the **first Second's** duration of the call will be made. This value will be rounded to the nearest 1/10 second for costing purposes. **Extended** costing will apply to the remaining duration.
- **Block** - a **fixed** charge of **Cost** for the **first Second's** duration or any part thereof, then **Fixed** cost for each block of **Seconds**, or part of a block
- **Part** - a **variable** charge of **Cost** will be applied to the whole of the call for each block of **Seconds** duration rounded to the nearest 1/10 second with **minimum costs applying**. This is the predominant method of costing in the United Kingdom until recently.

Basic	<input type="radio"/> None	Cost	6.730
	<input type="radio"/> Fixed		
	<input type="radio"/> Connect	Seconds	60.000
	<input type="radio"/> First		
<input type="radio"/> Block		Min. Cost	4.200
<input checked="" type="radio"/> Part			

N.B. - The **Cost** units are **pence** and the **time** units **seconds**.

Extended

The extended costing follows the rules of basic costing, but is only applied to the remaining duration of the call after basic costing has taken place.

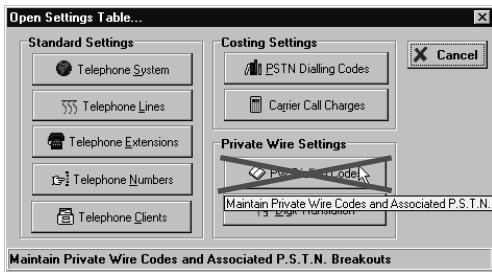
When all the necessary configuration settings have been made, the user clicks the 'Close File' button to exit the table, and clicks the 'Yes' button in the 'Warning' window to save the changes made.

Extended	<input checked="" type="radio"/> None	Cost	0.000
	<input type="radio"/> Fixed		
	<input type="radio"/> Block	Seconds	0.000
	<input type="radio"/> Part		

Private Wire Settings

PRIVATE WIRE (PW) DIALLING CODE TABLE

3.36



This facility is currently under review. It caters for PSTN breakout calls.

DIGIT TRANSLATION TABLE

When calls are made, an access code is normally given by the telephone system in the dialled number field. With the majority of switches '9' is dialled to access an outside line. This extra digit forms part of the dialled number string, but is not actually part of the number. Without the ability to remove 'extra' digits used to access lines or carriers, reports would be somewhat confusing. To make sense of the dialled number requires the removal of the access code, to leave a normal PSTN dialling code and phone number.

To open the '**Digit Translation**' table, click the '**Open File**' button and select '**Digit Translation**' from the '**Open Settings Table...**' Double-click on the '**All Digits**' icon to expand the table.



Highlight the '**All Digits**' entry and click on the '**Add Group**' button. Enter an appropriate group name in the text field and click on '**OK**'.



The next step is to enter details of all digits which need to be removed (or translated). Highlight the new group and click the '**Add Digit**' button to open the '**Digit Translation Details**' window.



Digit Translation Details

Site

Site

The site should be selected by clicking the **down-arrow** on the right of the text box and selecting the site from the list in the **drop-box**.

Remove

Remove

The access code that needs to be removed from the front of the dialled number is specified here.

Insert

Insert

Should an access code require to be replaced by something more consistent, e.g. a private wire access of 719123 being replaced by 71, then the specified number will be inserted in front of the dialled number. Normally, for PSTN type calls, this field will be left blank.

Name

Name

A name associated with the translation may be useful, especially within private networks where digit translation is very heavily used to identify routing.

Force Costing

☐ Force Costing To Use Carrier Below

BT.Basic Rate
BT.Business Advantage
BT.Business Choices 1
BT.Business Choices 2
BT.Business Choices 3
BT.Business Choices 4
BT.Business Choices 5
Cable & Wireless.GlobalLink

Where a line may be associated with more than one carrier, it can be very useful to associate a carrier's costing with a carrier call routing derived from the access code. This can be done by simply checking this box.

The carrier is selected by clicking the **down-arrow** at the right of the text box to activate the **drop-menu**. Use the **scroll-bar** on the right of the window to move up and down the list of carrier alternatives.

Clicking the carrier with the mouse to highlight the line will select the carrier and close the drop-menu.

*When all the necessary configuration settings have been made, the user clicks the **'Close File'** button to exit the table, and clicks the **'Yes'** button in the **'Warning'** window to save the changes made.*

Housekeeping

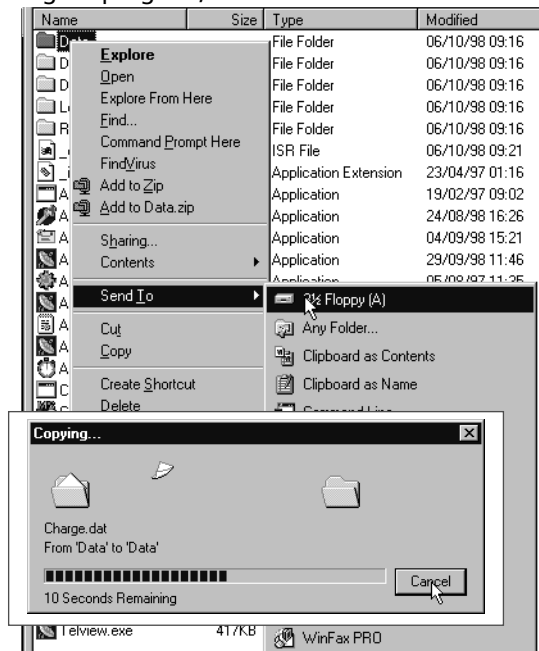
Whilst setting up **'Telephone Extensions'**, **'Telephone Numbers'**, etc. changes have been made to the various files held in the **'Data'** folder (under **'Advance'**). If, subsequently, there is a problem with the PC's hard drive and the Advance software has to be re-loaded, the files in the Data folder will revert to their installation default condition the system we have to be re-setup **UNLESS** a **back-up** of the **'Data'** folder has been made onto **floppy disk** (or equivalent). A black Backup disk is included with the other installation disks for just that purpose.

After making any adjustments using the Advance Configure program, **Windows/NT Explorer** should be used to copy the entire **'Data'** folder onto the floppy disk and store the disk safely away from the PC until the next time a backup needs to be made. Following this procedure could save hours of work in the unfortunate event of a PC failure.

The quickest way of achieving this is to select the **'Data'** folder and click the **right** mouse button. From the 'context sensitive' menu, select **'Send To'**. From the sub-menu choose the **'3½ Floppy (A)'** option (first item on the menu). This will copy the contents of the **'Data'** folder onto the floppy. A **'Copying...'** window opens, showing the progress of the file copy process.

When the task is complete, clearly label the disk and please put it in a safe place.

To keep hard disk memory usage to a minimum, the user could consider regular housekeeping of the call data files. Oak Telecom recommend the current month plus the two preceding months **'COL'** files are held on the machine, along with **'TEL'** files for the previous 12-months. Older **'COL'** files can be **'archived'**, either onto floppy disk, tape or some other suitable form or storage medium.



Importing into Advance Configure

The Oak Telecom Advance Configure module allows users to **import extension data** in CSV (Comma Separated Variable) format from other sources, such as a spreadsheet.

This feature is particularly useful where, for example, a previous extension list was held on a database or spreadsheet. The CSV format is probably the most common file type used for data 'exchange' between different items of software.

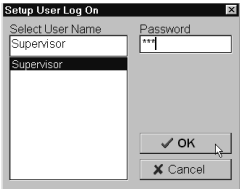
To illustrate the import process we have used the demonstration data held in Advance CMS. The starting point for the import is a CSV file, which would normally be manipulated within a spreadsheet application, for example Excel or Quattro Pro, as shown in the screen-shot. The first row contains column headings which need to be disregarded when the import is performed.

Column 'A' must always be present (which may need to be added to the file prior to importing). This entry may be one of three letters: -

- A = Add
- E = Edit
- D = Delete

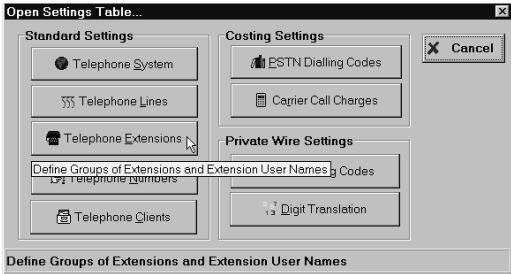
Any entry in the file which does not have one of the above prefix letters will be ignored. In the majority of import situations, it is probable that the extension is to be added to the system, therefore the record prefix (the letter in row 'A') would be 'A' for **Add**.

To import the CSV file into Advance Setup, the user first has to log-on as **'Supervisor'**. The default password is **'red'**.



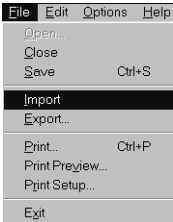
CONFIGURING ADVANCE

Once the password has been accepted, the user is presented with the Advance Configure opening window, **'Open Settings Table'**. To import the extension details, the user selects the **'Telephone Extensions'** button to open the appropriate window.

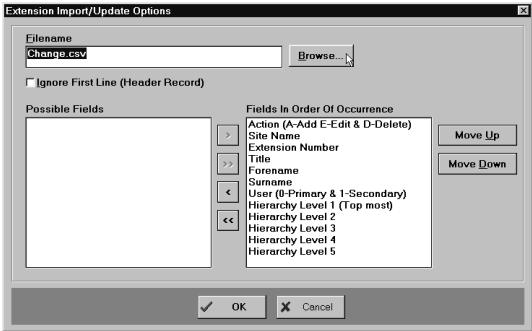


3.41

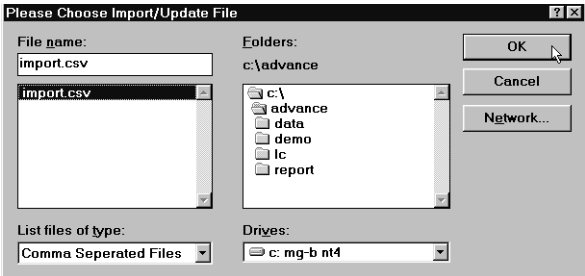
The next step is to click the **'File'** menu and select the **'Import'** option.



This opens the **'Extension Import/Update Options'** window.

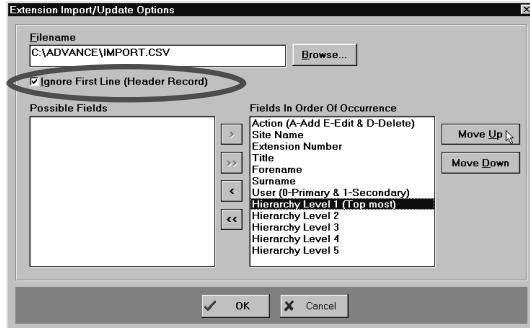


The first step is to locate the CSV file by using the **'Browse...'** button to open the **'Please Choose Import/Update File'** window. In this example, the CSV file (**'Import.csv'**) has already been placed in the main **'Advance'** directory for convenience. To select the file (shown in the left-hand window) the user highlights the entry by clicking on to it with the mouse, and



CONFIGURING ADVANCE

3.42



clicking on the **'OK'** button.

The selected file will now be listed in the **'Filename'** box. In this particular example, the first row of the CSV file contains column headers which need to be ignored. To do this the user simply clicks the check-box against **'Ignore First Line (Header Record)'**, circled in the screen-shot.

The next step is to select the Fields (**'Fields In Order Of Occurrence'**) which need to be used against the columns in the CSV file.

A point which needs to be clarified are the **'Hierarchy'** fields. These relate to the structure of the company or business. For example, in the case of a large corporate, the levels might look like this: -

Hierarchy Level 1 – Parent Company
Hierarchy Level 2 – Company
Hierarchy Level 3 – Site Location
Hierarchy Level 4 – Division
Hierarchy Level 5 – Department

In the case of a smaller business, only one or two levels may need to be used.

Of the available **'Fields'** listed, the following are mandatory: -

Site Name
Extension Number
Surname
Hierarchy Level 1

In other words, they must be used. If these fields do not exist as columns in the original spreadsheet, then the columns must be added before any attempt is made to perform an import into Advance Configure.

If we take the 'Import.csv' as an example the 'Fields' selected are: -

- Action (A, E or D) - 'A' for Add
- Hierarchy Level 1 - Company
- Site Name- Site (Location)
- Hierarchy Level 2 - Department
- Extension Number - Extn.
- Title - Title
- Forename - Forename
- Surname - Surname
- User - Prim or Sec user (only a Primary user will be shown in Reports)

	A	B	C	D	E	F	G	H	I
1	Add	Company	Site	Department	Extn	Title	Forename	Surname	Prim or Sec
2	A	The Example Co.	Bristol Office	Manager's Department	237	Miss	Annabel	Adams	0
3	A	The Example Co.	Bristol Office	Engineering Department	301	Mr	John	Bailey	0
4	A	The Example Co.	Bristol Office	Manager's Department	401	Mrs	Veronica	Baldwin	0
5	A	The Example Co.	Bristol Office	Engineering Department	134	Mr	Fred	Bell	0
6	A	The Example Co.	Bristol Office	Administration Department	322	Mrs	Grace	Bennett	0
7	A	The Example Co.	Bristol Office	Administration Department	228	N/A	N/A	Carteen	0
8	A	The Example Co.	Bristol Office	Accounts Department	102	Sir	Robert	Champion	0
9	A	The Example Co.	Bristol Office	Accounts Department	305	Mrs	Andrea	Collins	0
10	A	The Example Co.	Bristol Office	Accounts Department	144	Mr	Andrew	Cooper	0
11	A	The Example Co.	Bristol Office	Sales Department	219	Mr	Edward	Cox	0
12	A	The Example Co.	Bristol Office	Production Department	140	Mr	Brian	Ferry	0
13	A	The Example Co.	Bristol Office	Accounts Department	320	Miss	Sally	Fox	0
14	A	The Example Co.	Bristol Office	Production Department	300	Mr	David	Galloway	0
15	A	The Example Co.	Bristol Office	Drawing Office	135	Mr	Langley	Harrison	0
16	A	The Example Co.	Bristol Office	Production Department	143	Mr	Burt	Hartles	0
17	A	The Example Co.	Bristol Office	Manager's Department	405	Mr	Derek	Haskins	0
18	A	The Example Co.	Bristol Office	Sales Department	233	Mr	Trevor	Heston	0
19	A	The Example Co.	Bristol Office	Production Department	147	Mr	Graham	Johnstone	0
20	A	The Example Co.	Bristol Office	Service Department	130	Mr	Harold	Jones	0
21	A	The Example Co.	Bristol Office	Accounts Department	312	Mr	Stephen	Jones	0
22	A	The Example Co.	Bristol Office	Drawing Office	226	Mr	Jonathan	King	0
23	A	The Example Co.	Bristol Office	Sales Department	317	Mr	Burt	Lancaster	0
24	A	The Example Co.	Bristol Office	Manager's Department	403	N/A	N/A	MD Secrel	0
25	A	The Example Co.	Bristol Office	Service Department	129	Mr	Kewin	Martin	0

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These fields can be seen listed in the right-hand pane in the above window.

The unwanted fields have been moved into the left-hand pane using the '<' button, and the fields have been organised to correspond with the order of the CSV file using the 'Move Up' & 'Move Down' buttons. The field must firstly be highlighted, by clicking on the entry with the mouse, before any action can be taken.

Extension Import/Update Options

Filename: C:\ADVANCE\IMPORT.CSV [Browse...]

☒ Ignore First Line (Header Record)

Possible Fields: Hierarchy Level 3, Hierarchy Level 4, Hierarchy Level 5

Fields In Order Of Occurrence: Action (A-Add E-Edit & D-Delete), Hierarchy Level 1 (Top most), Site Name, Hierarchy Level 2, Extension Number, Title, Forename, Surname, User (0-Primary & 1-Secondary)

[Move Up] [Move Down]

[OK] [Cancel]

Once all the fields have been selected and arranged in the correct order, clicking the 'OK' button will start the import of the CSV file.

A bar-graph window indicates the progress of the import. When the process is completed, the user is shown an 'Information' window, indicating the results of the data import. The user is advised to check that the number of rows in the CSV file correspond to the number of lines read within the file.

Clicking on the 'OK' button will display a second 'Information' window indicating the location of any exceptions encountered during the import.

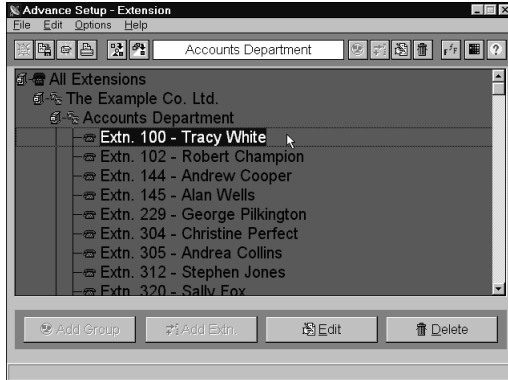
Information

50 Extensions Added.
0 Extensions Edited.
0 Extensions Deleted.
(51 Lines In File Read).

[OK]

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When the Advance Setup window is shown, the imported data can be viewed.

	A	B	C	D	E	F	G	H	I	J
1	Add	Parent Company	Company	Site	Department	Extn	Title	Forename	Surname	Prim or Sec
2	A	The Example Co. Ltd.	Exampco Data	Bristol Office	Manager's Department	237	Miss	Annabel	Adams	0
3	A	The Example Co. Ltd.	Exampco Data	Bristol Office	Engineering Department	301	Mr	John	Bailey	0
4	A	The Example Co. Ltd.	Exampco Data	Bristol Office	Manager's Department	401	Mrs	Veronica	Baldwin	0
5	A	The Example Co. Ltd.	Exampco Data	Bristol Office	Engineering Department	134	Mr	Fred	Bell	0
6	A	The Example Co. Ltd.	Exampco Data	Bristol Office	Administration Department	322	Mrs	Grace	Bennett	0
7	A	The Example Co. Ltd.	Exampco Data	Bristol Office	Administration Department	228	N/A	N/A	Canteen	0
8	A	The Example Co. Ltd.	Exampco Data	Bristol Office	Accounts Department	102	Sir	Robert	Cham	0
9	A	The Example Co. Ltd.	Exampco Data	Bristol Office	Accounts Department	305	Mrs	Andrea	Collins	0
10	A	The Example Co. Ltd.	Exampco Data	Bristol Office	Accounts Department	144	Mr	Andrew	Coope	0
11	A	The Example Co. Ltd.	Exampco Data	Bristol Office	Sales Department	219	Mr	Edward	Cox	0
12	A	The Example Co. Ltd.	Exampco Data	Bristol Office	Production Department	140	Mr	Brian	Ferry	0
13	A	The Example Co. Ltd.	Exampco Data	Bristol Office	Accounts Department	320	Miss	Sally	Fox	0
14	A	The Example Co. Ltd.	Exampco Data	Bristol Office	Production Department	300	Mr	David	Galloway	0
15	A	The Example Co. Ltd.	Exampco Data	Bristol Office	Drawing Office	135	Mr	Langley	Harrison	0
16	A	The Example Co. Ltd.	Exampco Data	Bristol Office	Production Department	143	Mr	Burt	Hartles	0
17	A	The Example Co. Ltd.	Exampco Data	Bristol Office	Manager's Department	405	Mr	Derek	Haskins	0
18	A	The Example Co. Ltd.	Exampco Data	Bristol Office	Sales Department	233	Mr	Trevor	Heston	0
19	A	The Example Co. Ltd.	Exampco Data	Bristol Office	Production Department	147	Mr	Graham	Johnstone	0
20	A	The Example Co. Ltd.	Exampco Data	Bristol Office	Service Department	130	Mr	Harold	Jones	0
21	A	The Example Co. Ltd.	Exampco Data	Bristol Office	Accounts Department	312	Mr	Stephen	Jones	0
22	A	The Example Co. Ltd.	Exampco Data	Bristol Office	Drawing Office	226	Mr	Jonathon	King	0
23	A	The Example Co. Ltd.	Exampco Data	Bristol Office	Sales Department	317	Mr	Burt	Lanactar	0

To further elaborate on the 'Hierarchy Level' usage, we have included a second example of the import routine, using an extra 'Hierarchy Level'.

In this example, we have included a 'parent' company (The Example Co. Ltd.) and its subsidiary (Exampco Data).

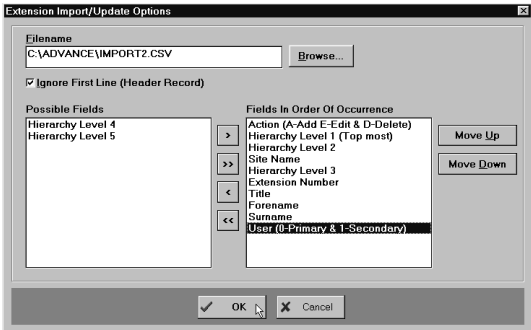
In this instance the fields used were: -

Action (A, E & D) - A for Add
Hierarchy Level 1 - Parent Company
Hierarchy Level 2 - Company
Site Name - Site (location)
Hierarchy Level 3 - Department
Extension Number - Extn.
Title - Title
Forename - Forename
Surname - Surname
User - Prim or Sec

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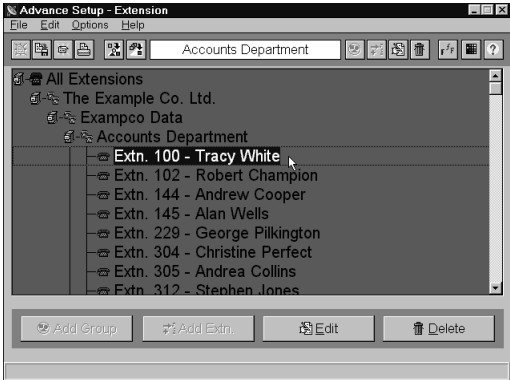
CONFIGURING ADVANCE

As with the preceding example, the fields need to be put in order and those not required must be moved into the left-hand pane. Once this has been completed, clicking the 'OK' button will start the data import.



3.45

As can be seen in the screen-shot, the extra field used ('Hierarchy Level 2') has produced the subsidiary company (Exampco Data) in the extension 'tree'.



Chapter Four

GATHERING CALL DATA

4.1

Introduction

The gathering and processing of call data is handled by three different modules within Advance. The actual collection and storage of 'raw' data is undertaken by **Advance Collect**. This module runs constantly, as part of the Startup group. Collect stores the data by writing a sequential **COL** (or Collect) file on the **hard disk**. At midnight, the **COL** file for the current day is **closed** and a new one **opened**.

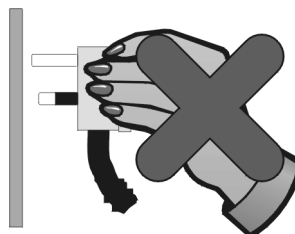
The **COL** file is processed by **Convert**. The 'raw' call data is passed through a switch-specific '**translator**' within the module, which is able to **interpret** the switch output and the resultant information on switch activity is then appended to a monthly **TEL** file. It is the **TEL** file which Advance uses as the data-source when preparing your **reports**.

The final module of this trio is **Advance Timer** which, as its name suggests, acts as **scheduler** for **Advance Convert**. At **00:10** each day **Timer** runs the **Convert** module, which reads the **COL** file for the past 24 hours and writes the translated data to the open **TEL** file. Advance Timer is also used to run Automatic Reporting (see page 5.19).

Leave it switched ON

As the call logger has to be ready to capture and store information from your telephone system at all times of day or night, 7 days a week, it is **ESSENTIAL** that the PC is **left switched on at ALL** times. In the event of a power cut, the system is set up in such a way that, when power is restored, the collection of call information is automatically restarted. However, information may well have been irretrievably lost during the period that the power was off.

It is quite acceptable to turn the monitor off when no one is actively using the call logger, but the system unit must remain turned on.



**Don't turn the
computer off!**

Running Advance Collect

Advance Collect is placed in the **Startup** group of your computer during the software **installation** process. As noted on the previous page, this application **must be running 24-hours a day** for the system to report accurately. Advance uses the Collect module to gather call data from the switch, via a barrier box.

Please ensure the call logging output is enabled on the switch. If in any doubt, please consult with your system installer / maintainer on this matter. The **SMDR** (or call data) **output** of the **switch** is passed to a serial port on the computer via a **Barrier Box** supplied by Oak Telecom. The Barrier Box is a device that provides a level of isolation between the computer and switch; this preventing any voltage fluctuations (or 'spikes') causing damage to either unit. The Barrier Box is also a valuable diagnostic tool, as it shows if a signal is being received by the computer.

The Barrier Box

This has proved to be a very effective device, however, it will not prevent damage occurring in the event of a direct lightning strike!

The unit is fitted with two bi-colour LED's (light emitting diodes), marked **RXD** (receive data) and **DTR** (data terminal ready) which indicate the status of the signal. If call data is being sent by the switch, the **RXD** (receive) LED will flicker **green/red**. If the indicator is showing a steady green, then no data is passing through.

The colour combinations are: -

RXD-Green	Connected to the switch - No data
RXD-Green/Red	Connected to the switch - Data passing through
RXD-Off	No connection with switch
DTR-Red	Normal state
DTR-Green	Collect is not running
DTR-Off	No connection with computer

Therefore the correct combination for data collection will be **RXD green/red** flickering and **DTR** steady **red**.

Checking data collection

Unless intelligible telephone call data is being stored by the call logging PC, the sophisticated features of the Advance system are of no use. It is, therefore, important to regularly check that data collection is proceeding correctly.

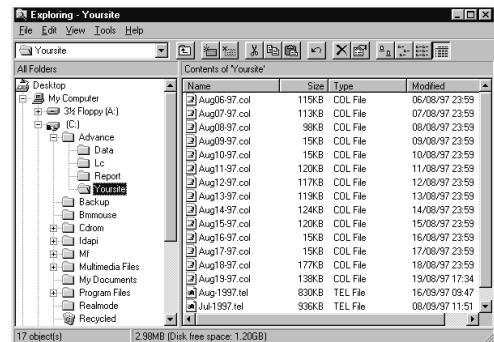
Whenever the call logger screen is viewed, the **'Collect'** task should be visible on the task bar. This indicates that the data collection program is running. Alongside the text **'Collect Com'**, will be a pair of round brackets with dots or numbers inside. You should be able to see that the numbers increase from time to time. This corresponds with the receipt of data from the telephone system and the writing of that information onto the hard disk. If you can see the **'Protection Barrier'** unit, this will also correspond with the **RXD light (LED) flickering green/red**.

During quiet telephone periods the numbers in the brackets may disappear and be replaced by dots but, as soon as someone completes a telephone call, the numbers should reappear.

If the **'Collect'** task or icon is not visible, it is advisable to re-boot the PC. Once restarted, the **'Collect'** task or icon should once again be seen. If this is not the case, or if the numbers in the round brackets are not increasing although it is clear that people are completing telephone calls, you should get in contact with the Oak Telecom Customer Service team who will assist in investigating the cause of the problem.

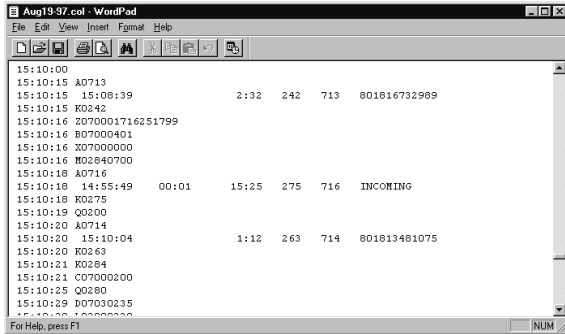
If you can see the **'Collect'** task or icon and the numbers are increasing from time to time, it is almost certainly the case that data collection is proceeding satisfactorily.

To be absolutely certain that usable data is being stored, run Windows/NT **Explorer** or **File Manager**. In your call logger **Working Directory** (under the **'Advance'** folder) locate the appropriate daily collected data file (**'*.COL'** file) and double-click on it. This should



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open the file using **WordPad** or a similar text-editing program. Scroll through to the end of the file and check that:

- the last timestamps reflect the current PC time, and
- the call information which appears to the right of those timestamps is normal text (letters and numbers) rather than non-standard characters (smiley faces, etc.).

If non-standard characters are seen, contact Oak Telecom Customer Service for assistance.

Closing down Collect

There may be occasions when user may need to close down call data collection, for example to perform routine maintenance on the computer or phone switch. Whilst Advance Collect is closed down, no call logging information can be collected by Advance Classic, therefore any calls made via the switch during this period will be unrecorded.

To shut down the collection of call logging data the user: -

- **Right clicks** with the mouse cursor within the **Collect button** on the **taskbar** to invoke the context sensitive menu
- Highlight the '**Close**' option with the mouse cursor, and **single click**
- A '**Warning**' window opens to remind the user that no data can be collected when Collect is closed. The '**OK**' button must be clicked to proceed.
- Advance Collect will now close down.

Using Advance Convert

The function of **Advance Convert** is to process raw call data held in the **COL** (collect) file. Convert contains software components called translators. A **translator**, which is **switch specific**, is selected when the **'Site'** within **Advance Configure** is set-up (see page 3.9). The translator selected in Configure is able to 'interpret' the output of the switch and write meaningful call data to the **'TEL'** file.

Each **calendar month**, Advance Convert opens a new **TEL** file, which is added to each time Convert is run. This file, which is written in our own proprietary format, is the basis for the reports running with Advance.

Convert normally runs, without any user intervention, once every 24 hours, under the scheduling control of **Advance Timer**. The vast majority of the time Convert can be left to run automatically. However, there may be a few occasions when the application will need to be run manually.

Manual conversion of collected data

This is achieved by running **'Advance Convert'** from the desktop, or from the Advance for Windows program group, and leaving the PC to 'fall through' on the default options of converting all **New** data, i.e. data collected since the last processing. The whole program will proceed on timeouts and return to the desktop on completion. Reports can now be run on calls which have taken place up till Convert ran.

There may be occasions when files may need to be re-converted, for example if the wrong switch was selected when Advance was first configured, or if the switch output has changed. This can occur for a number of different reasons: -

- Carrier Call Charge tables have been updated
- changes have been made in the line or digit translation tables
- the switch software has been upgraded, resulting in a change in the data output format
- the switch has been changed for a different make or model
- other changes have been made to the system, resulting in a change in the form of the data output

If for any reason the switch output changes, the translation of that data

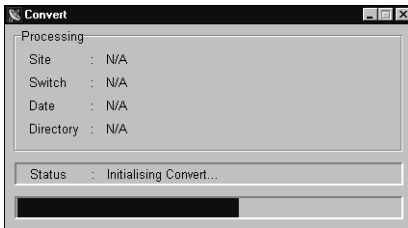
GATHERING CALL DATA

may no longer be valid, and the resultant TEL file would not produce accurate reporting of the call management information. Under these circumstances, the best course of action is to **re-convert** the **COL** files stored on the computer since the change occurred. If a new switch has been fitted to the phone system, then the first step is to ensure the right translator is being used, which is selected within **Advance Configure** in the **'Telephone System'** table.

4.8



To run **Advance Convert**, either click on the **'Advance Convert'** icon on the desktop or select **'Advance Convert'** via **'Start'**, **'Programs'**, **'Advance for Windows'**.



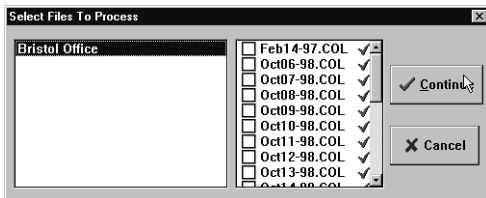
Before Convert opens, the application must run through an **'Initialisation'**. Progress is shown by a bar-graph at the bottom of the window.



When the application opens, there are three options of **'File Selection'** which are made using the **radio buttons**. The title-bar at the top of the window shows the progress of the count-down timer. If no **'File Selection'** is made, Advance Convert will automatically convert any **'New'** data which has been saved on the system since the process last ran (normally 00:10 hrs that morning).

'All' will process all the COL files found on the system. This should only need to be used in exceptional circumstances.

If the **'Selected'** radio button is chosen, and the **'Continue'** button clicked, Convert opens the **'Select Files To Process'** window. The left-hand frame lists all the **'Sites'**. Highlight the **'Site'** to be processed. All the **'COL'** files available for that **site** will be shown in the right-hand pane, with a scrollbar for ease of selection. To the right of each **'COL'** file which has already been processed is a **red '✓'**.

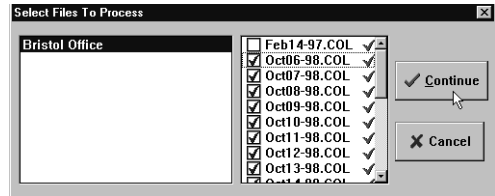


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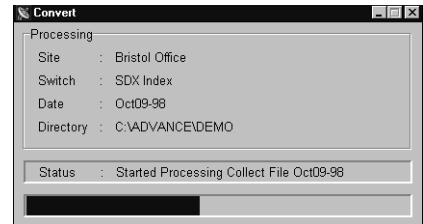
On the left of each file is an **empty check-box**. Select the earliest file to be re-converted by clicking on the **check-box**. This and all subsequent files will be marked with a **blue '✓'**. Click the '**Continue**' button.

Advance Convert will then start processing all the selected files. The progress of the conversion process is shown in the window. Each COL file is shown in sequence, the window displaying: -

- the site name
- the switch make and model for that site
- the date of the COL file in the following format; Month Date-Year, which is the same as the file-name
- the source directory of the COL file
- the status of the conversion process for that file
- a bar-graph indicating progress



4.9



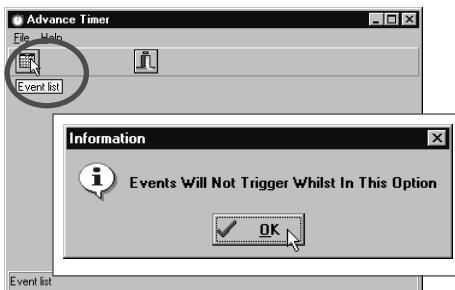
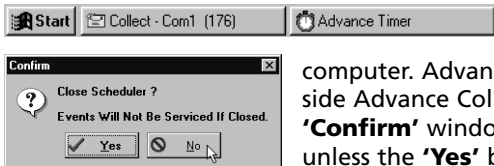
When all the files have been completed, Advance Convert closes itself down. Any reports can now be run on the call data.

Whenever any data has to be re-converted, for whatever reason, we would always recommend a report be run, just to check the results are actually as expected.

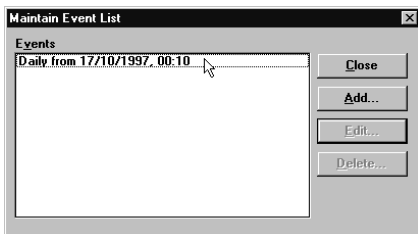
Advance Timer

Advance Timer is the event scheduling module of the Advance software system. Its primary function is to run Advance Convert every night, normally at 00:10 hours. As with Advance Collect, the module can only function properly if it is running all the time. The module is also pre-configured to run Automatic Reports immediately following Advance Convert (00:10 hours).

For this reason a shortcut to Advance Timer is installed (by default) into the Startup group of the computer. Advance Timer runs constantly (visible on the task-bar, alongside Advance Collect). If the user accidentally tries to close Timer, a **'Confirm'** window is displayed, and the module will not close down unless the **'Yes'** button is clicked.



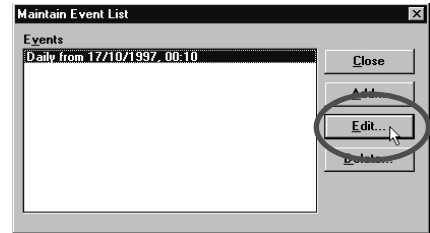
To open Advance Timer, simply click the **button** on the **task-bar**, then select the **'Event list'** button on the Advance Timer toolbar (circled in the picture). An **'Information'** window appears, to warn that no events can be triggered by the scheduler while Timer is open. To proceed, click the **'OK'** button.



The **'Maintain Event List'** window opens, showing the scheduled events. Only the default item is shown in this screen-shot, set to run daily at 00:10 hours. To **'Edit'** an **'Event'**, the entry must be highlighted with the mouse.

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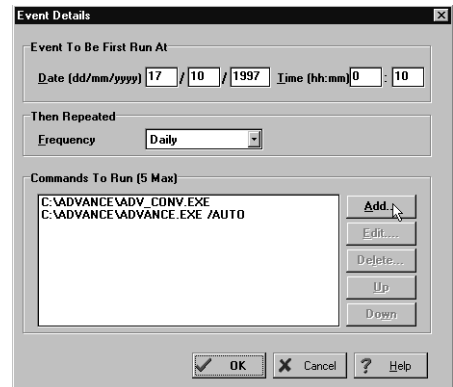
The **'Edit'** & **'Delete'** buttons will now become active. Clicking the **'Edit'** button opens....



4.11

....the **'Event Details'**. As can be seen from the screenshot, two events are scheduled to run at 00:10 hours. These are Advance Convert and Automatic Reports ('C:\ADVANCE\ADVANCE.EXE /AUTO'). Although the automatic printing of reports may be set to run at this time, if no Automatic Reports have been created (see page 5.19) nothing will happen.

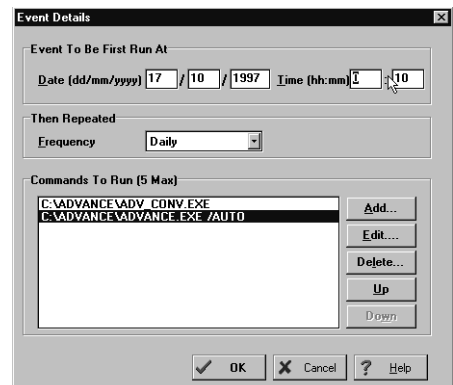
If no event is selected (highlighted) in the **'Commands To Run'** pane, only the **'Add'** button will be active, the other buttons being 'greyed-out'.



As soon as an event is selected, the remaining buttons become active. To change the scheduled time of an event, the user simply enters the revised time in the **'Time'** boxes. Time is entered in 24-hour format, thus 12.15 a.m. is entered as 00:15 and 2.30 p.m. would be 14:30.

Changing the scheduled time of either event will change **both** events. To change the time Automatic Reports are run, please see page 4.12.

When any necessary changes have been made, click the **'OK'** button to close the **'Event Details'** window. At the **'Maintain Event List'**, select the **'Close'** button. At the main Advance Timer window, the user should **not close** the application, but click the **minimise** button. If Timer is closed down, scheduled events will not run!

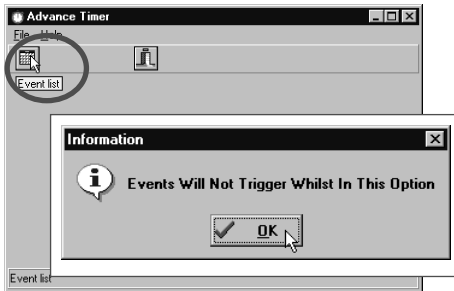


Re-scheduling Automatic Reports

Running under default settings, Automatic Reports are set to run immediately after Advance Convert at 00:10 hours each day. If no reports have been setup, then nothing will occur.

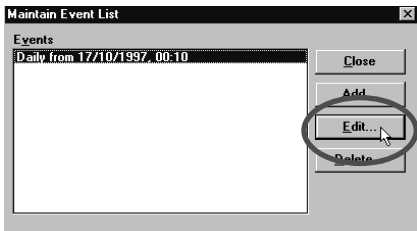
If the user wishes to run reports at a different time, then the following steps need to be taken to re-schedule the event.

- Create the **Automatic Reports** to be run (see page 5.19)
- Use the **'Dates'** section to select when the report or reports are to be run

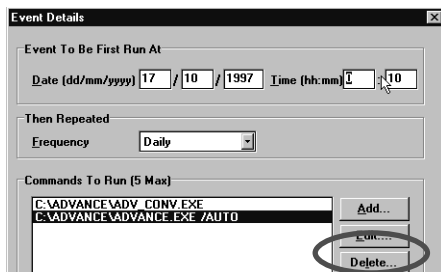


To change the time when the reports are printed, open **Advance Timer** by clicking the button on the taskbar and click the **'Event List'** button on the toolbar (circled in the screen-shot).

When the **'Information - Events will not...'** window opens, click the **'OK'** button to continue.



Highlight **'Daily from 14/10/97...'** in the **'Events'** pane and click the **'Edit'** button to open the....



...**'Event Details'** window. Highlight the **'*:ADVANCE\ADVANCE.EXE /AUTO'** entry (the **'*'** is the hard drive containing Advance, which is usually **'C'**). Please make sure **a note is made** of which disk Advance is located on and click the **'Delete...'** button to remove Automatic Reports from this **'Event'** schedule.

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Click **'OK'** to close the **'Event Details'** window.

Click the **'Add...'** button in the **'Maintain Events'** window to open a new **'Event Details'** window.

The current date is automatically placed in the **'Events to Be First Run At'** box. Set the **'Time'** (in 24-hour clock notation) and click the **'Add...'** button to open a **'Command Details'** window.

Enter **'*:ADVANCE\ADVANCE.EXE /AUTO'**, replacing the **'*'** with the drive designation. If the **'Command Line'** entry is the default location of Advance, then when the **'Select...'** button for the **'Directory'** is clicked, an **'Information'** window opens. If the automatically located directory is correct, then this will be selected by clicking the **'OK'** button.

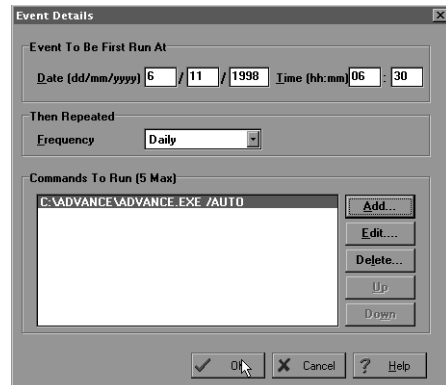
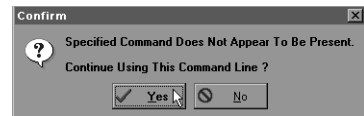
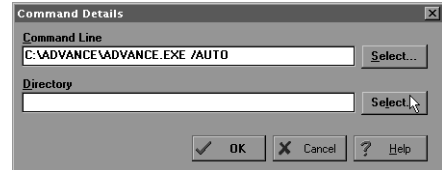
If the default directory is not correct, then the user can either enter the drive and directory (normally C:\ADVANCE) where Advance CMS is located on the **'Directory'** line (use the tab key to move between the fields), or use the **'Select...'** button to open the **'Browser'**, then select the drive and directory.

Click the **'OK'** button to close this window. A **'Confirm'** window opens, stating that the **'Specified Command...'**. Click the **'Yes'** button to continue using the command (this window always appears seeking confirmation).

The new entry will now appear in the **'Commands to Run'** pane. Click **'OK'** to close the **'Event Details'** window.

Click the **'Close'** button in the **'Maintain Event List'** window to return to the main Advance Timer window.

Do not close Timer - use **'minimise'** instead. If the application were closed, none of the scheduled tasks would be run.



4.13

Chapter Five

RUNNING REPORTS

5.1

Introduction to Advance Reporting

One of the greatest strengths of the Advance Classic Call Management software is the flexibility and user configurability of the Report module.

Reports can be individually tailored to have customer-specified names, together with a comprehensive range of selection criteria.

Furthermore, each user who has access to the Advance system, can be presented with their own specific menu of reports. This allows different levels of users to have anything from a single entry menu, right through to an all-encompassing list that can run to 100 reports or more.

As mentioned previously, each report can have a range of selection criteria applied to it. For example:-

- **Cost**

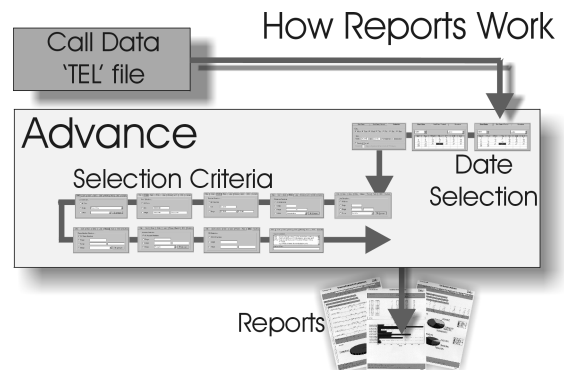
Minimum cost; selecting, for example, all calls costing more than £1.00

Maximum cost; used for selecting calls which fall below a pre-set maximum

The example reports show extracts of different reporting styles, which form the basis of each user's potential reporting list.

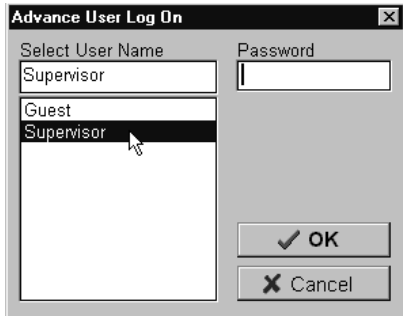
Oak Telecom are constantly adding new report profiles to the list. Therefore, the samples included are only intended to give you an indication of the full range available within the Advance for Windows Reporting module.

N.B. Reports are switch-dependent! They are only able to report on the call logging information provided by the phone system.



User Access Control with Passwords

5.4



Advance for Windows Call Management incorporates a powerful security feature, which enables the System Administrator to control not only access to the software, but also what reports individual users can access.

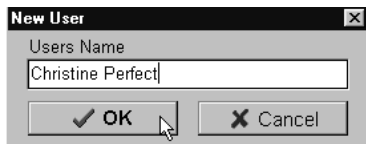
This feature ensures that not only can access to the Call Management data be controlled, but also unauthorised alterations to the structure of the reporting system be prevented. The 'master' settings for both Advance (Reports) and Advance Setup are held in Advance.

Either click the '**Advance Reports**' icon on the desktop or select '**Advance Reports**' from '**Start**', '**Programs**', '**Advance for Windows**'. To be able to access all the features of the reporting module, the user must log-on as '**Supervisor**'. Highlight the '**Supervisor**' user name in the box (the password box will now become active) and type in the password. The default password is '**red**'.

To make any alterations to users and passwords, select '**Users**' from the '**Options**' menu.



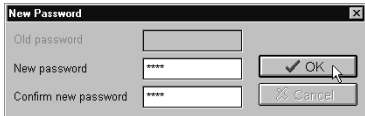
New users can be added by clicking the '**New User**' button....



....entering the name in the box and clicking the '**OK**' button. The next stage is to enter the password for the new user....

RUNNING REPORTS

....in the **'New Password'** box. For security seasons, the characters entered are shown as asterisks. The tab key is used to move between boxes.



Once the password has been entered for the new user, the security level and access must be set. See the table .

Please ensure that the **'Security Level'** set for the user is lower than the **'Supervisor'**. The user can have access to **'All Extensions'** or **'User's Department And Below'**; these choices being selected by the radio buttons. To access the latter option, the user's name *must* correspond to an entry in the **Telephone Extension** table within **Advance Configure**.

At the bottom of the **'User Information'** window is the **'Reports Directory'** box. The default for all users is **'*:\\ADVANCE\\REPORT'**, but this can be changed. If alternative folders have been created for users (using Explorer, etc.), these can be selected using the **'Browse'** button on the right of the text-box.



5.5

Although password setup is straightforward, subsequent User administration can become very time consuming if lots of users, each with their own set of reports have been created. This is worth bearing in mind when planning your user access strategy!

Advance Security Levels

	Level 1	Level 2	Level 3	Level 4	Level 5
Run/Edit Reports	Yes	Yes	Yes	Yes	Yes
View Auto Reports	Yes	Yes	Yes	Yes	No
Edit Auto Reports	Yes	Yes	Yes	No	No
Stop Collect	Yes	Yes	No	No	No
Enter Configure	Yes	Yes	No	No	No
Create/Edit Users	Yes	No	No	No	No

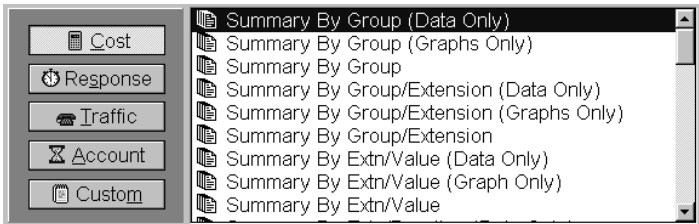
Call data selection

Within the fully licensed application, there is the choice of textual (data only), graphical or combined reports. The differing forms of data presentation can be viewed by looking at the '**Example Report**' for each of the types.

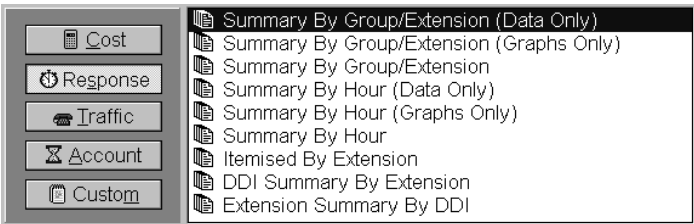
The report types are divided into the following groups:-

- **Cost**
- **Response**
- **Traffic**
- **Account**
- **Custom**

The screen-shots on this page show the different reports available within each of the five categories. Please bear in mind this represents only a fraction of the full range presently available, with new reports being added all the time.



The **Cost** category relates to the cost of outgoing calls, either from individual extensions, offices, departments or line groups. As you can see from the scroll-bar, these are only the first nine of a comprehensive selection of reports.



Response provides the user with full details of incoming calls lost, calls answered and, more importantly, how quickly these calls were answered.

RUNNING REPORTS

The **Traffic** reports are used to indicate the levels of line utilisation and can highlight either excess lines, or a shortage of lines into a site/location/department or group and how busy extensions and / or departments are.

The **Account** group of reports enable clients of the company to be billed for calls made by them, or on their behalf. For example, a nursing home or hotel might use these reports to bill individual rooms or customers.

Custom houses reports which cover specific requirements that do not fall under the 'standard' report profiles supplied with the application.

The foregoing categories can also be subjected to various selection or analysis criteria tools, to make the application still more flexible. Please turn to page 5.8.



Using selection criteria

Advance Reports offers you a comprehensive range of selection or analysis criteria to enable the required information to be extracted.

The first selection criteria that must be set is the period you want the report to cover located under the **'Analysis Period'** tab. Advance offers three report period alternatives.

5.8

• Start Date

To set the **'Start'** date, the user selects the **'Year'** (using the up and down arrows), **'Month'** (selected from a drop-down scroll box) and highlights the **'Date'** by clicking on it with the mouse.

• End Date

The **'End'** date is set in the same way as **'Start'**. The user simply selects the **'Year'** (with the up and down arrows), **'Month'** (selected from a drop-down scroll box) and highlights the **'Date'** by clicking on it with the mouse cursor.

• Period

For ease of use, the user can set a report **'Period'** via **'radio'** buttons, rather than having to calculate / select the report **'End Date'**. This feature is accessed by clicking the **'Set Period'** radio button at the top of the **'End Date/Period'** tab (see picture).

• Selection

Using the **'Day'** and **'Time'** feature, you could, for example, report on all calls made outside normal office hours.

The **'Busiest Period'** selection extracts the busiest day or days (dependent on the number entered in the box) during the reporting period set. For example, the busiest week (entered as 07 days in the box) during a month, **but should not be used with standard reports.**

The 'Analysis Criteria' tab accesses the other selection criteria which are....

• Site

The default setting '**All Sites**' will select calls for all the sites being logged. Single sites can be selected via a 'drop-box', as can '**Groups**'. See page 5.12 for details of setting up '**Groups**'.

• Cost

The default setting is '**All Costs**', however '**Min**' can be used to *exclude* all calls below a certain value, or '**Range**' to only report on calls between set amounts. For example call costing more than £0.50 and less than £10.00.

• Duration

The time equivalent of the '**Cost**' tab. The default is '**All Durations**'. The format of the fields is '**HH:MM:SS**', which is the call duration in hours, minutes and seconds.

These two tabs (Cost & Duration) are invaluable in tracking 'exceptional' calls.

• Extension

The default setting is '**All Extensions**'. '**Single**' allows you to report on all calls to or from a single extension.

'**Range**' allows the user to reports on calls for extensions within the range of numbers entered in the two fields.

Extension '**Groups**' are selected using the 'drop-box'. Please see page 5.12 for details of setting up and maintaining '**Groups**'.

• Line

The **'Line'** tab allows the selection of calls made on, or received on a particular line, range of line numbers or a line group. The default setting is **'All Lines'**, which selects calls no matter what line they are on.

'Single' selects all the calls (in or out) on a single line. **'Range'** allows the selection of calls made on lines entered in the two input fields.

Line **'Groups'** are selected via the easy-to-use 'drop-box'. See page 5.12 for details on the use of **'Groups'**.

• Phone

The **'Phone'** tab allows the selection of calls made to, or received from a particular number, range of phone numbers or a group of numbers. The default setting is **'All Phone Numbers'**, which selects calls no matter what numbers are involved.

'Single' selects all the calls (to or from) on a single number. **'Range'** allows the selection of calls made to or from numbers entered in the two input fields.

Phone **'Groups'** are selected via the easy-to-use 'drop-box'. See page 5.12.

Phone numbers can only be reported if: -

- the CLI (Caller Line Identification) information is sent by the caller and not withheld.
- CLI information is available (not available from many international countries or certain UK Mobile Networks)
- the users switch is able to detect and report CLI data
- The user has purchased the (optional) Advance for Windows CLI/DDI Reporting Module.

• Account

This tab covers the selection of calls made on, or received on behalf of a particular account number, range of account or group of accounts, the default being '**All Account Numbers**'.

Accounts are telephone 'clients' who are charged for call time. For example, calls made or received on behalf of a company or business and then charged to them at a later date. Advance will keep a record of all calls relating to a particular account.

The '**Single**' field selects calls for a single account number. '**Range**' allows the selection of calls for account numbers in the range entered in the input fields.

Account '**Groups**' are selected via the easy-to-use 'drop-box'. See page 5.12 for details on the use of '**Groups**'.

5.11

• DDI

This tab allows the selection of the **DDI (Direct Dialling In)** numbers of incoming calls. This information is only available if the sending system has included the **DDI** number with the call, and your switch is able to report on **DDI** information.

You need to have purchased the **Advance for Windows CLI Reporting Module** to be able to take advantage of this feature.

• Custom

The '**Custom**' options available are 'context sensitive' and will change according to the report category being used at the time.

The usage is '**XXX(x)**', for example a report covering the top 30 calls would be entered as '**TOP(30)**'.

Some of the options available are: -

Cost Reports

- **CD(X) Pre Cost Discount** - the figure for 'X' is the percentage discount
- **CU(X) Post Cost Uplift** - the figure for 'X' is the percentage uplift (% added to the cost)
- **OUT(X) Outgoing Call Types** - the values for 'X' can be 'N' for None, 'O' for Original and 'T' for Transferred out. e.g. a 'Custom Criteria' of OUT(O) will report on all original outgoing calls
- **TAN(X) Tandem Call Types** - 'X' can be 'N' for None, 'O' for Original and 'T' for Transferred out e.g. a 'Custom Criteria' of TAN(O) will report on all original tandem calls
- **SCR(X) Select Call Region** - the value of 'X' can be any combination of 'L' for Local, 'R' for Regional, 'N' for National, 'I' for International, 'M' for Mobile or 'P' for Premium.
- **DPB(X) Page Break** after department levels, e.g. DPB(1,2). Exact usage will depend on the way the user has set-up departmental hierarchy within Advance Configure.
- **TOTLS** - Report totals only

Response Reports

- **RT(X) Response Time** where the value of 'X' is the target time in seconds
- **AT(X) Answer Time** where the value of 'X' is the minimum time in seconds
- **LCR(X) Minimum Lost Call Ring** where 'X' is the minimum time in seconds
- **INC(X) Incoming Call Types** where 'X' is either 'N' for None or any combination of 'O' for Original, 'L' for Lost, 'B' for Busy, 'A' for Answered, 'U' for Unanswered or 'T' for Transferred. e.g. INC(O,A) will report all original answered calls
- **INT(X) Internal Call Types** where 'X' can be either 'N' for None, 'O' for Original or 'T' for Transferred.
- **DPB(X) Page Break** after department levels, e.g. DPB(1,2). Exact usage will depend on the way the user has set-up departmental hierarchy within Advance Configure.

Traffic Reports

- **CD(X) Pre Cost Discount** - the figure for 'X' is the percentage discount
- **CU(X) Post Cost Uplift** - the figure for 'X' is the percentage uplift (% added to the cost)
- **AT(X) Answer Time** where the value of 'X' is the minimum answer time in seconds
- **OUT(X) Outgoing Call Types** - the values for 'X' can be 'N' for None, 'O' for Original and 'T' for Transferred out. e.g. a 'Custom Criteria' of OUT(O) will report on all original outgoing calls
- **INC(X) Incoming Call Types** where 'X' is either 'N' for None or any combination of 'O' for Original, 'L' for Lost, 'B' for Busy, 'A' for Answered, 'U' for Unanswered or 'T' for Transferred. e.g. INC(O,A) will report all original answered calls
- **INT(X) Internal Call Types** where 'X' can be either 'N' for None, 'O' for Original or 'T' for Transferred.
- **TAN(X) Tandem Call Types** where 'X' can be either 'N' for None, 'O' for Original or 'T' for Transferred
- **SCR(X) Select Call Region** - the value of 'X' can be any combination of 'L' for Local, 'R' for Regional, 'N' for National, 'I' for International, 'M' for Mobile or 'P' for Premium.

5.13

Account Reports

- **CD(X) Pre Cost Discount** - the figure for 'X' is the percentage discount
- **CU(X) Post Cost Uplift** - the figure for 'X' is the percentage uplift (% added to the cost)

Custom Reports

- **CD(X) Pre Cost Discount** - the figure for 'X' is the percentage discount
- **CU(X) Post Cost Uplift** - the figure for 'X' is the percentage uplift (% added to the cost)
- **TOP(X)** Reports on the top 'X' calls e.g. TOP(100). The default is 50. N.B. if a Text/Graphical report is used as the basis, a TOP(30) report will fit in one sheet.

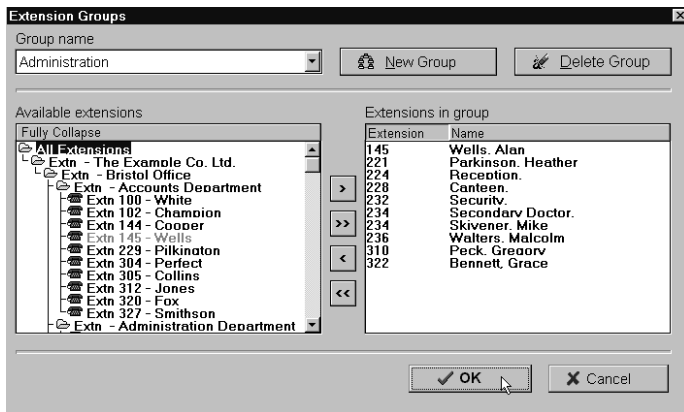
Groups

Site, Extension, Line, Phone and **Account** have an additional feature to allow reporting '**Groups**' to be created.

Clicking on the '**Groups**' button opens....



5.14

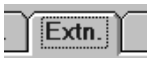


....the main '**Groups**' window. In this example, the Administration group of Extensions is shown. This 'example' data is used in the Demonstration version of Advance for Windows and is also included within the standard working software as the 'Bristol Office' of the 'Example Co. Ltd.'. This enables users to 'practice' in safety!

Groups can be added or removed at the touch of a button. Individual selections moved

in and out of the groups either individually using the '>' or '<' buttons, or 'en masse' with the '>>' and '<<' buttons.

Creating an Extension Group



To create an Extension '**Group**' within Advance Reports, click on the '**Extn.**' tab and select the '**Group**' radio button. If no groups have been set up, the highlighted groups drop box will be empty.



Clicking on the '**Groups**' button opens the '**New Group**' naming box. Once the name of the group has been entered, clicking the '**OK**' button....



RUNNING REPORTS

....opens the '**Extension Groups**' window. All the phone extensions are listed in the left-hand pane. In this illustration, the sample data provided with Advance for Windows (The Example Co. Ltd.) has been used.

The employee extensions have been grouped by department, making the selection process much simpler. To include all the members of the department in the group, simply highlight the department and click the single right arrow ('>') to place them into the new reporting group. Individual members of staff can be added by highlighting the name in the left-hand pane and using the single right arrow.

The double right arrow ('>>') will add all the extensions to the group. Extensions can be moved in and out of groups, with ease, using the left and right arrows. Extensions can also be **dragged** and **dropped** between panes.

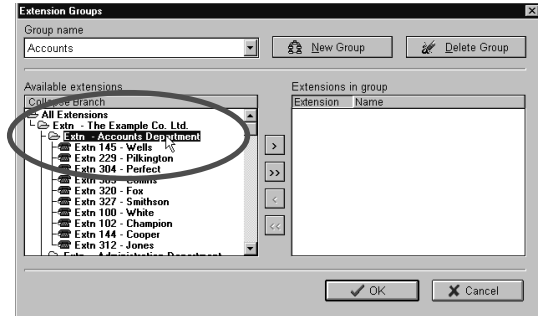
New groups can be created by clicking the '**New Group**' button, next to the '**Group name**' drop-box. Existing groups are selected from this drop-box and can then be edited or deleted.

Once the group has been created, clicking the '**OK**' button will open a '**Save changes...**' window. Clicking the '**Yes**' button completes the process. The same procedure is adopted for the creation of '**Site**', '**Line**', '**Phone**' and '**Account**' Groups.

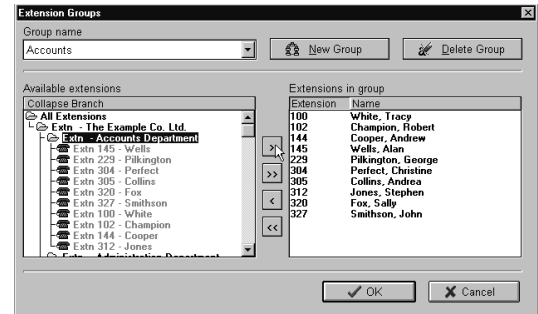
The saved extension groups will be user specific. So, if the user has set up 10 users and wants them all to have their own extensions groups, these will have to be set up (and maintained) 10 times over (for each user).

The ability to use one, two, three or all the foregoing criteria in any combination enables the user to create customised reports for any situation or circumstance.

This broad range of selection criteria is available across the full 'suite' of report types available to the user.



5.15



Running a Report

Once the report category has been selected and all the selection criteria set, the report can then be run.

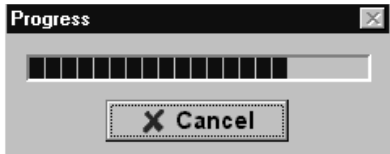
Advance offers two report option buttons at the bottom of the main window: -

5.16



- 'Example Report'
- 'Run Report'

The majority of report within Advance has an '**Example Report**', prepared, using the sample calls contained in the '**Demo**' (in the licensed software) or '**Bristol**' (in the demonstration version) directories. These '**Example Reports**' are intended to show the layout and content of the selected report. These examples can be replaced with the user's own data if you require (see page 5.16).



Clicking the '**Run Report**' or '**Run Analysis**' buttons will start the process of collecting and processing the call data which was defined by the selection criteria. The progress of report preparation is shown by a '**bar-graph**' on screen. The time taken depends on the volume of calls to be processed and the speed of the computer.

Cost

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9 October 2001

Itemised By Extension

oak

Day	Date	Time	Duration	Phone Number	Region	Area Name	Rate	Cost
Bristol Office								
Extn : 128 Mrs Helen Roberts								
Thu	Oct	01	10:22	00:01:26	01462490738	N Hitchin	DayTime	0.10
Thu	Oct	01	11:21	00:00:50	0031541014240	I Netherlands	DayTime	0.20
Thu	Oct	01	11:34	00:01:02	003155419650	I Netherlands	DayTime	0.25
Thu	Oct	01	11:55	00:01:13	0031541014240	I Netherlands	DayTime	0.29
Thu	Oct	01	11:56	00:01:06	0031541014240	I Netherlands	DayTime	0.27
Thu	Oct	01	12:29	00:01:03	01712615758	N London (Inner)	DayTime	0.07
Thu	Oct	01	12:33	00:01:03	01712615758	N London (Inner)	DayTime	0.07
Thu	Oct	01	12:38	00:00:59	01712615758	N London (Inner)	DayTime	0.07
Thu	Oct	01	13:19	00:01:17	01719287735	N London (Inner)	DayTime	0.09
Thu	Oct	01	13:21	00:01:07	0031541014240	I Netherlands	DayTime	0.27
Thu	Oct	01	13:27	00:01:07	0031541014240	I Netherlands	DayTime	0.27
Thu	Oct	01	13:31	00:01:05	0031541014240	I Netherlands	DayTime	0.26
Thu	Oct	01	14:03	00:01:57	0031541014240	I Netherlands	DayTime	0.47
Thu	Oct	01	14:21	00:00:43	01924951491	N Leamington Spa	DayTime	0.05
Thu	Oct	01	14:26	00:01:07	0018146236173	I USA	DayTime	0.22
Thu	Oct	01	14:35	00:00:52	0018146236173	I USA	DayTime	0.17
Thu	Oct	01	14:44	00:01:04	0031541014240	I Netherlands	DayTime	0.26
Thu	Oct	01	14:46	00:01:34	0031541014240	I Netherlands	DayTime	0.38
Thu	Oct	01	14:48	00:03:18	0031541014240	I Netherlands	DayTime	0.80
Thu	Oct	01	14:55	00:00:55	5739942	L Local	DayTime	0.04

Start

Aplo Database Server

Advance - User : Super...

Adobe Acrobat

Paint Shop Pro

Cost

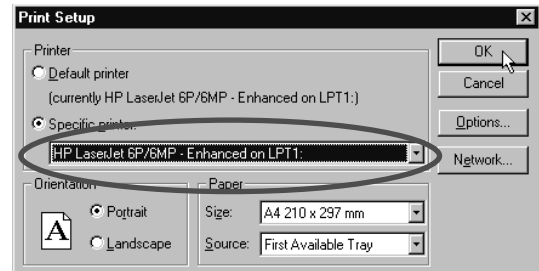
09:27

When all the calls have been processed, the finished report will be displayed on-screen.

Printing Reports

Before running any reports, the printer should be setup. Advance CMS will not run reports without a printer! From the main Advance screen, select **'File | Print Setup...'** to open the **'Print Setup'** window. If the user has access to more than one printer, firstly select the one to be used from the 'drop-box' (circled in the picture). The **'Options'** button sets the print quality, etc. and is specific to the printer chosen.

Once the **'Paper'** and **'Orientation'** have been set, clicking the **'OK'** button will complete these settings.



5.17

The report displayed on screen is a print preview. Therefore, the appearance will be affected by the type of printer connected to the system. The toolbar across the top of the screen is used to 'navigate' around the report.

The two buttons on the left of the toolbar control how the report page is displayed on screen. The left-hand button (**'Zoom To Fit'**) adjusts the preview so that the whole report can be seen on-screen, however the text is illegible. The other, **'Zoom To Width'**, which is the normal setting, uses the full width of the screen. To move up and down the report page in this mode, use the scroll-bar on the extreme right of the window. Clicking the right mouse button will invoke a **'Zoom'** button. Clicking this opens a **'Zoom'** window, where a zoom factor can be entered.



The next group of four 'navigation' buttons enables the user to move through multiple page reports with ease. The single arrow moves one page at a time, whilst the bar and arrow (on the right of the picture) moves to the last page of the report.

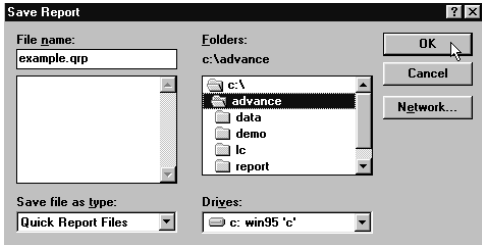


'Save Report', saves the report for future reference. This is not normally necessary, as the report can be re-run at any time, using the monthly **'*.TEL'** files which are automatically saved on the system.



RUNNING REPORTS

5.18



Clicking the button opens the **'Save Report'** window. The right-hand pane is used to locate the destination directory (or folder) for the report. Once this is done, the report must be given a name (8 characters or less), the file extension being **'QRP'**. Clicking the **'OK'** button will complete the process of saving the report.

These (saved) reports can be viewed at any time by selecting the **'Open'** option from the

'File' menu (top left of the main Advance CMS screen). This opens the **'Open Existing Report'** browser window which works in the same way as the **'Save Report'** window.



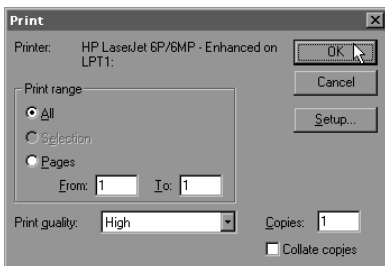
The next button, **'Save As Example Report'** enables the user to replace the **'Example Report'** with one of their own choosing. After the button is clicked, an **'Information'** box opens, requesting confirmation that the existing example is to be replaced. Clicking the **'Yes'** button will save the new report.



'Create Export Report' will only be functional if the **'Export to Spreadsheet'** option for Advance has been purchased. If this module is not installed, the button will be 'greyed-out'. Clicking the button will produce a **'CSV'** export file in the **'Report'** directory/folder with the same name as the report, but with a **'CSV'** extension. The names of the 'normal' report files all have a **'QRP'** extension (see 5.23 for full details).



The final two buttons on the toolbar are, on the left, **'Print Report'** and on the right the **'Exit'** button which closes the Report window.



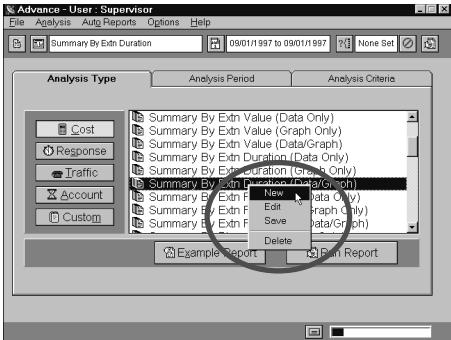
Clicking the **'Print'** button opens the **'Print'** window. The **'Setup'** button opens the same **'Print Setup'** window shown on page 5.17. The user has the option of either printing **'All'** the pages of the report, the default setting in the **'Print range'** box, or printing 'selected' **'Pages'**. These can either be a single page (e.g. 1 to 1), or a range of pages (e.g. 9 to 11).

The default number of **'Copies'** for printing is 1, but the user can change this figure to the required number. The **'Collate copies'** check-box only works when multiple copies are printing.

Creating new ‘Customised’ Reports

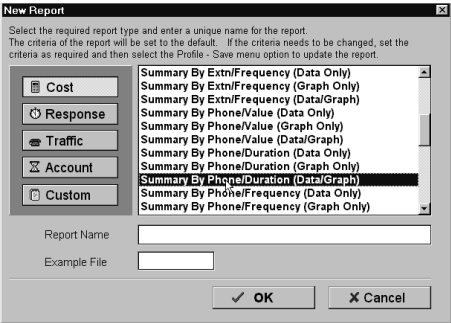
‘Customised’ report profiles (based on existing reports) can easily be created.

To do this, simply **right click** with the mouse within the Report List box to open the **Report Menu**, click onto **‘New’** which opens the....

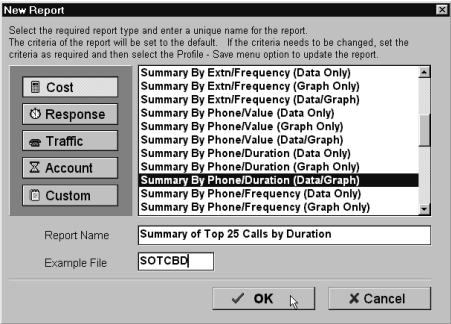


5.19

....‘**New Reports**’ window. The next step is to select the existing report that will act as the basis (or ‘template’) of the new report.

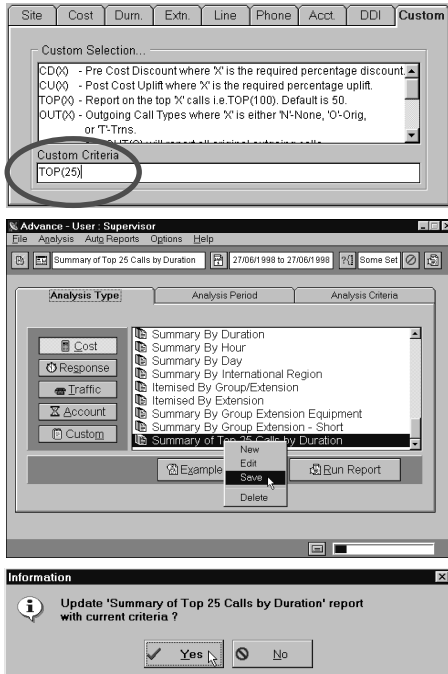


Once this has been highlighted within the list of available reports, give the new report a unique name (maximum 40 characters), a name for the ‘**Example File**’ (maximum of 8 characters) and click the ‘**OK**’ button to save the report ‘**profile**’.



RUNNING REPORTS

5.20



The next step is to highlight the new report within the Report List box and set the required criteria. In this example, the '**Custom**' criteria '**TOP(X)**' was used, entered in the '**Custom Criteria**' box as '**TOP(25)**'.

Once all the criteria have been set, once again **right click** with the mouse over the new report and select the '**Save**' option from the **Reports Menu**.

An '**Information**' box asks for confirmation that the chosen report should be 'updated' with the new criteria. Clicking the '**Yes**' button will '**Save**' the changes and the new 'custom' report is ready for use.

Running Reports Automatically

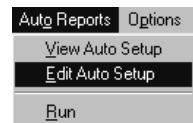
Advance for Windows includes an **'Auto Reporting'** facility to enable the user to automate the production of frequently used reports.

This is particularly useful within a company where a set number of day, week, month or period-end reports are required; for example, **'Cost'** reports for each department or **'Response'** reports for a Call Centre or Telesales Office.

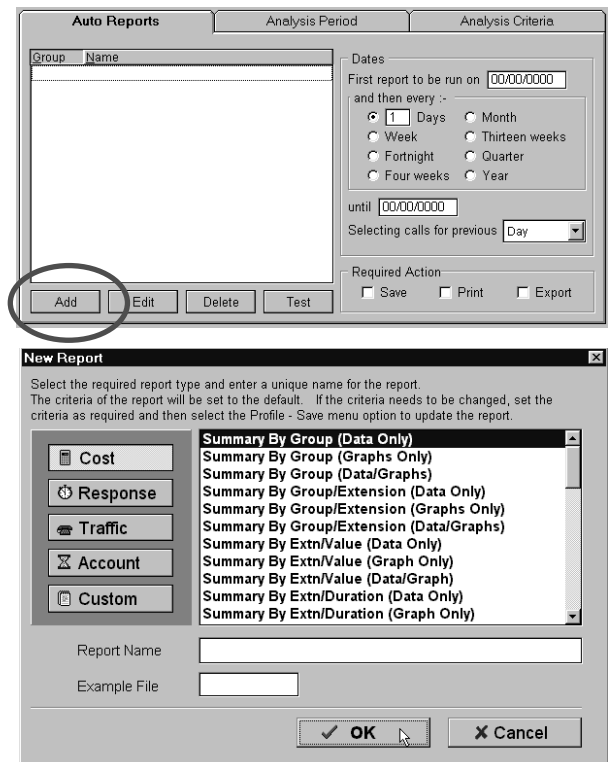
To open **'Auto Reports'**, click the menu and select **'Edit Auto Setup'** from the options.

Setting the reporting interval is simplicity itself, but the **'Start'** and **'End'** dates within the **'Analysis Period'** tab are non-functional as these settings have no relevance within **'Auto Reports'**. The reports to be run are selected by clicking the **'Add'** button which opens....

....the **'New Report'** window. The report is 'added' by selecting the required report, by highlighting the report name....

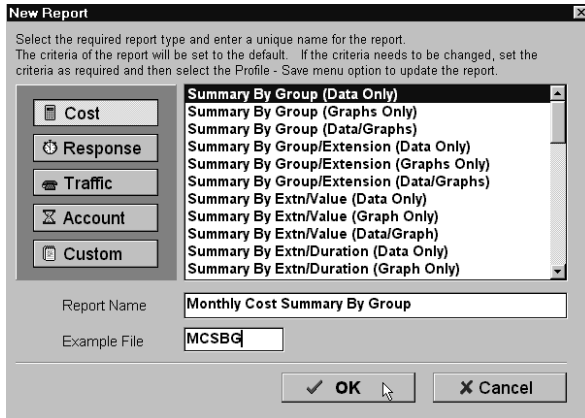


5.21



RUNNING REPORTS

5.22

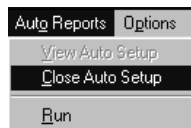


....giving it a new name to reflect its function (for example, '**Monthly Cost Summary By Group**'); Entering a file name for the '**Example File**' (not more than eight characters) and clicking the '**OK**' button....



....which places the new report in the '**Auto Reports**' box. As with any of the standard report profiles available to you, any one or combination of criteria can be applied to the report or reports to be run automatically.

Any Report listed in the '**Auto Reports**' pane can be highlighted by clicking with the mouse cursor, which then gives the user the options of '**Editing**', '**Deleting**' or '**Testing**' the Report.



'**Testing**' should be undertaken as soon as the Auto Report(s) has been created, to ensure the contents are correct, and all the required detail is present.

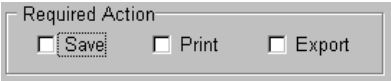
'**Auto Reports**' do not have to be printed, but could, instead, be **saved** and printed later. The main advantage of printing the reports(s) automatically overnight is to avoid tying-up a printer during potentially busy day-time periods running long reports. The disadvantage of this strategy occurs in the event of a problem with the printer, for example a paper-jam, running out of toner/ink/paper, etc. If the 'Auto Reports' are being

RUNNING REPORTS

printed overnight, no staff are available to remedy the problem.

One possible solution would be to run the **'Auto Reports'** overnight, but **saving** the reports to hard disk instead of printing. The reports could then be printed under supervision whenever the printer, or printers, were free.

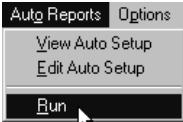
These options are selected in the **'Required Action'** box, via the three **check-boxes**. The **'Export'** option (**'Export to Spreadsheet'**) will only function if this optional module is present (see page 5.24 for details).



5.23

'Auto Reports' are normally run under the scheduling control of **'Advance Timer'**, however, they can be run manually by selecting **'Run'** from the **'Auto Reports'** menu (*users have reported in some instances variable results using this facility*).

To exit the **'Auto Reports'** module, you select **'Close Auto Setup'** from the **'Auto Reports'** menu.



Export to Spreadsheet

With this **optional module installed**, any Advance CMS report can be saved in **'CSV'** (Comma Separated Variable) format. CSV files can be imported into the vast majority of spreadsheets (Excel, Quattro, Lotus, etc.) and a large number of databases. This facility permits call management report information to be directly incorporated into costings forecasts, budget analysis, etc., without the need for the data to be re-entered into the spreadsheet.

Any Advance CMS report can be exported, including **'Auto Reports'** (by selecting the **'Export'** check-box in the **'Required Action'** section).

Exporting has already been mentioned on page 5.18, but this section looks at the subject in greater detail. As mentioned above, the basis of the 'Export' module is saving report data in CSV format.

To create an export, the user must first run a 'normal' Advance report with the required **'Analysis Period'** and **'Analysis Criteria'** set. When the report has been **run** and is displayed on-screen, then the data can be exported. If the module has been purchased, the **'Create Export Report'** button on the toolbar will be active.

Clicking the button opens an **'Information'** window, requesting permission to create the export report. To continue, the user clicks the **'OK'** button. The CSV export report is now created. The file name allocated to the export report is exactly the same as the 'example' file name, but with a CSV suffix. The export file is written to the **'REPORT'** folder of Advance.



Csbyevdo.qrp	15KB	QRP File	16/10/97 13:08
Csbyevgo.qrp	37KB	QRP File	16/10/97 13:08
Csbygv.csv	3KB	Microsoft Excel Comma ...	25/11/98 17:12
Csbygv.qrp	534KB	QRP File	16/10/97 13:08
Csbygdo.qrp	26KB	QRP File	16/10/97 13:08

For example, 'Cost Summary by Group' has an 'example' report file name **'CSBYG.QRP'**. The CSV export has the same file name as the 'example' report, but different suffix, so the name is **'CSBYG.CSV'**. Although this sounds complicated,

the screen-shot clearly shows the two files viewed with Explorer.

Each time the same report is run for export, the existing file will be overwritten, therefore if the user needs to keep a copy, the file will need to be re-named. If the export is being run by one specific user, the user **'Reports Directory'** could be changed under **'Users'** (see User Access Control page 5.4).

As soon as the export process has been run, the file is available for import into a spreadsheet.

Cost Itemised by Extension

The report on the following page has been used as an example to illustrate the ability of Advance Reports to present the user with the information they need to effectively manage their 'phone system. This report is not used for every single call, but is principally for identifying exceptional calls, for example:-

5.25

The key report for tracking '**exceptional**' phone use

- **Expensive calls**
- **Calls with an exceptional duration**
- **Calls to unusual numbers, for example 999 or 0891**

The data is presented in extension number order and user with calls presented in chronological order. The following information is given against each call:-

- **Day on which the call was made**
- **Date on which the call was made**
- **Time at which the call was made**
- **Duration of the call**
- **Phone number called**
- **Destination area of the call**
- **The rate at which the call was charged at**
- **Cost of the call**

The call destination name is derived from a full list, which Oak supply as an integral part of the Advance for Windows program. The facility also exists for customers to add their own destination names to this list (see page 3.21), for example branch, office or site names.

By using the built-in selection criteria, calls costing more than **£x.xx**, or lasting longer than **x-minutes**, or outside '**normal**' office hours, can easily be identified and printed.

EXAMPLE REPORTS

5.26

5 October 2001

Itemised By Extension



Day	Date	Time	Duration	Phone Number	Region	Area Name	Rate	Cost
			HH:MM:SS					
Bristol Office				Extn : 128		Mrs Helen Roberts		
Thu	Oct	01	10:22	00:01:26	01462490738	N Hitchin	DayTime	0.10
Thu	Oct	01	11:21	00:00:50	0031541014240	I Netherlands	DayTime	0.20
Thu	Oct	01	11:34	00:01:02	003155419650	I Netherlands	DayTime	0.25
Thu	Oct	01	11:55	00:01:13	0031541014240	I Netherlands	DayTime	0.29
Thu	Oct	01	11:56	00:01:06	0031541014240	I Netherlands	DayTime	0.27
Thu	Oct	01	12:29	00:01:03	01712615758	N London (Inner)	DayTime	0.07
Thu	Oct	01	12:33	00:01:03	01712615758	N London (Inner)	DayTime	0.07
Thu	Oct	01	12:38	00:00:59	01712615758	N London (Inner)	DayTime	0.07
Thu	Oct	01	13:19	00:01:17	01719287735	N London (Inner)	DayTime	0.09
Thu	Oct	01	13:21	00:01:07	0031541014240	I Netherlands	DayTime	0.27
Thu	Oct	01	13:27	00:01:07	0031541014240	I Netherlands	DayTime	0.27
Thu	Oct	01	13:31	00:01:05	0031541014240	I Netherlands	DayTime	0.26
Thu	Oct	01	14:03	00:01:57	0031541014240	I Netherlands	DayTime	0.47
Thu	Oct	01	14:21	00:00:43	01926851491	N Leamington Spa	DayTime	0.05
Thu	Oct	01	14:26	00:01:07	0018146236173	I USA	DayTime	0.22
Thu	Oct	01	14:35	00:00:52	0018146236173	I USA	DayTime	0.17
Thu	Oct	01	14:44	00:01:04	0031541014240	I Netherlands	DayTime	0.26
Thu	Oct	01	14:46	00:01:34	0031541014240	I Netherlands	DayTime	0.38
Thu	Oct	01	14:48	00:03:18	0031541014240	I Netherlands	DayTime	0.80
Thu	Oct	01	14:55	00:00:55	5739942	L Local	DayTime	0.04
Thu	Oct	01	15:01	00:03:11	0031541014240	I Netherlands	DayTime	0.77
Thu	Oct	01	15:12	00:00:41	01628651858	N Maidenhead	DayTime	0.05
Thu	Oct	01	15:39	00:01:07	0031541014240	I Netherlands	DayTime	0.27
Thu	Oct	01	15:43	00:01:17	0031541014240	I Netherlands	DayTime	0.31

The 'Cost Itemised by Extension' report lists every single call made by each extension in chronological order. As noted on the preceding page, this report is principally used for tracking 'exceptional' calls.

Sample Report Selection

On the following pages we have reproduced some examples of the wide range of reports available within Advance for Windows Call Management. Each of these reports can, of course, be further manipulated using the selection/analysis criteria tabs shown on pages 5.6 to 5.13.

The call data used for the example reports is available within all versions of Advance for Windows, and can be found in the '**Demo**' directory.

Three of the selection/analysis criteria '**tabs**' have been applied to the examples shown, to reduce the length of the reports. We have only used the Administration Department of the Example Company's Bristol Office for all the reports. The criteria tabs used throughout are: -

- **Site** - Single (Bristol Office)
- **Extension** - Group (Administration)
- **Line** - Group (BT Group 1) which covers lines 701 to 719

This has been done to enable users to readily compare the differing types of report. In some cases, the pictures do not show the whole report, but only selected areas, to illustrate the varying methods of presenting the call data.

The appearance of the finished report print-out is dependent on the printer used, and the printer fonts available. The on-screen reports are produced in print preview mode and, therefore, the same comments apply.

Please bear in mind these are combined reports (with the textual and graphical data on the same print-out) and represent only a small fraction of the full range available with Advance CMS.

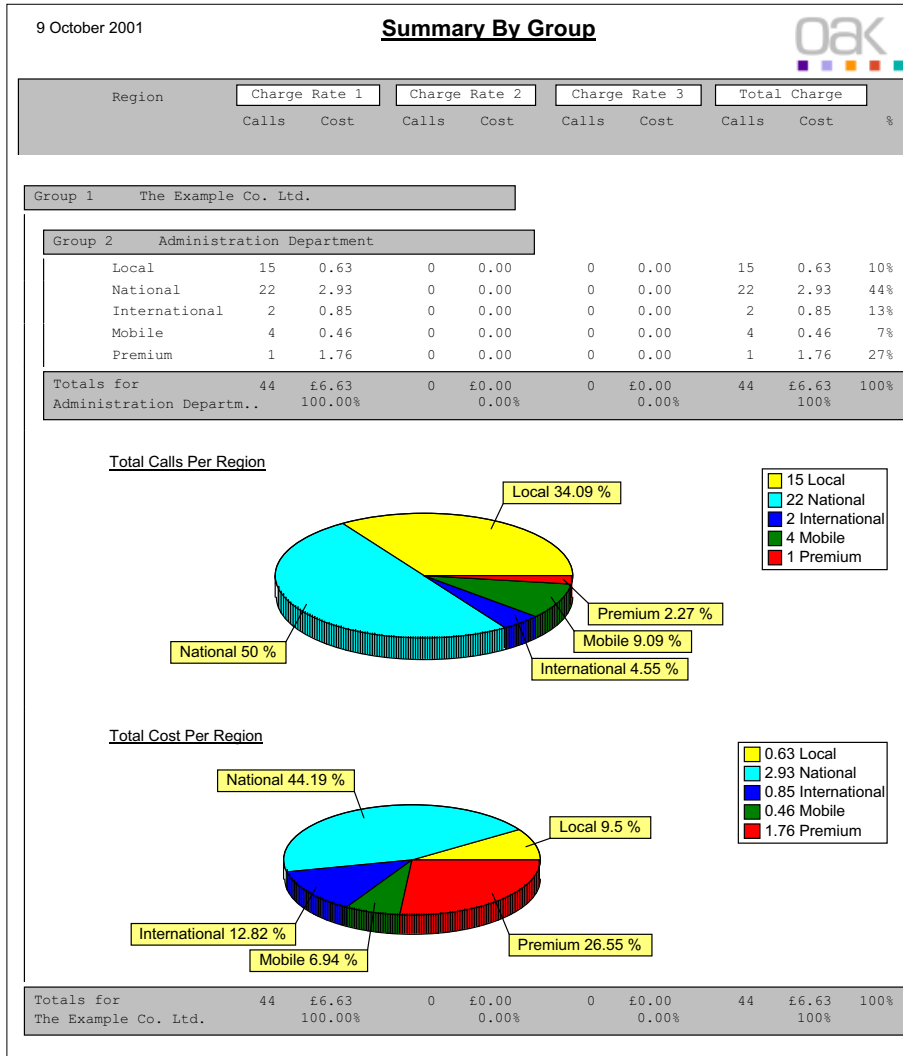
Advance offers the user unparalleled flexibility and adaptability.

Important Note

Each telephone system provides a varying level of detail, with regard to telephone calls. The minimum is usually simple information about outgoing calls and goes right through to fully comprehensive call detail, which includes incoming and internal calls, ring times and lost call information. **Please note that the reports in this booklet are switch-dependant, thus they are provided as a guide only.**

EXAMPLE REPORTS

5.28




Only the first page of this 2-page report is pictured. The graphs show costing details for the Administration Department. The graphs on the following pages of this report detail the site (Bristol Office) and the company as a whole (The Example Co. Ltd.)

ADVANCE CLASSIC - OAK

EXAMPLE REPORTS

9 October 2001

Summary By Group/Extension



Region	Charge Rate 1		Charge Rate 2		Charge Rate 3		Total Charge		
	Calls	Cost	Calls	Cost	Calls	Cost	Calls	Cost	%

Group 1The Example Co. Ltd.

Group 2Administration Department

Bristol Office		Extn : 221		Mrs Heather Parkinson					
Local	2	0.09	0	0.00	0	0.00	2	0.09	3%
National	2	0.55	0	0.00	0	0.00	2	0.55	20%
Mobile	3	0.41	0	0.00	0	0.00	3	0.41	15%
Premium	1	1.76	0	0.00	0	0.00	1	1.76	63%
8		£2.81	0	£0.00	0	£0.00	8	£2.81	100%

Bristol Office		Extn : 224		Reception					
International	2	0.85	0	0.00	0	0.00	2	0.85	100%
2		£0.85	0	£0.00	0	£0.00	2	£0.85	100%

Bristol Office		Extn : 228		Canteen					
Local	2	0.17	0	0.00	0	0.00	2	0.17	20%
National	4	0.64	0	0.00	0	0.00	4	0.64	74%
Mobile	1	0.05	0	0.00	0	0.00	1	0.05	6%
7		£0.86	0	£0.00	0	£0.00	7	£0.86	100%

Bristol Office		Extn : 231		Miss Dana Anderson					
National	5	0.38	0	0.00	0	0.00	5	0.38	100%
5		£0.38	0	£0.00	0	£0.00	5	£0.38	100%

Bristol Office		Extn : 232		Mr Fox Ducovney					
Local	4	0.08	0	0.00	0	0.00	4	0.08	17%
National	4	0.40	0	0.00	0	0.00	4	0.40	83%
8		£0.48	0	£0.00	0	£0.00	8	£0.48	100%

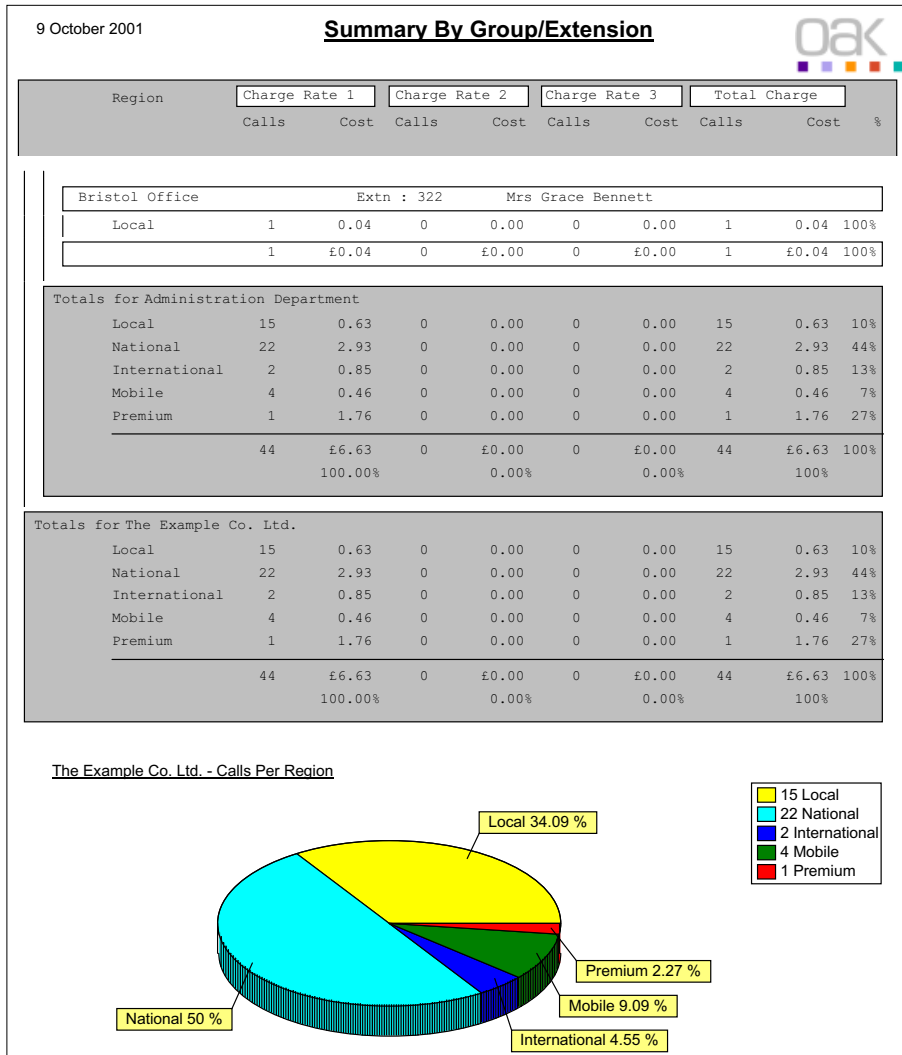
Bristol Office		Extn : 236		Mr Malcolm Walters					
Local	1	0.04	0	0.00	0	0.00	1	0.04	4%
National	6	0.92	0	0.00	0	0.00	6	0.92	96%
7		£0.96	0	£0.00	0	£0.00	7	£0.96	100%

5.29

Page one of a 3-page report (page 2 of this report is on the following page). The calls made by each extension are listed according to the call type.

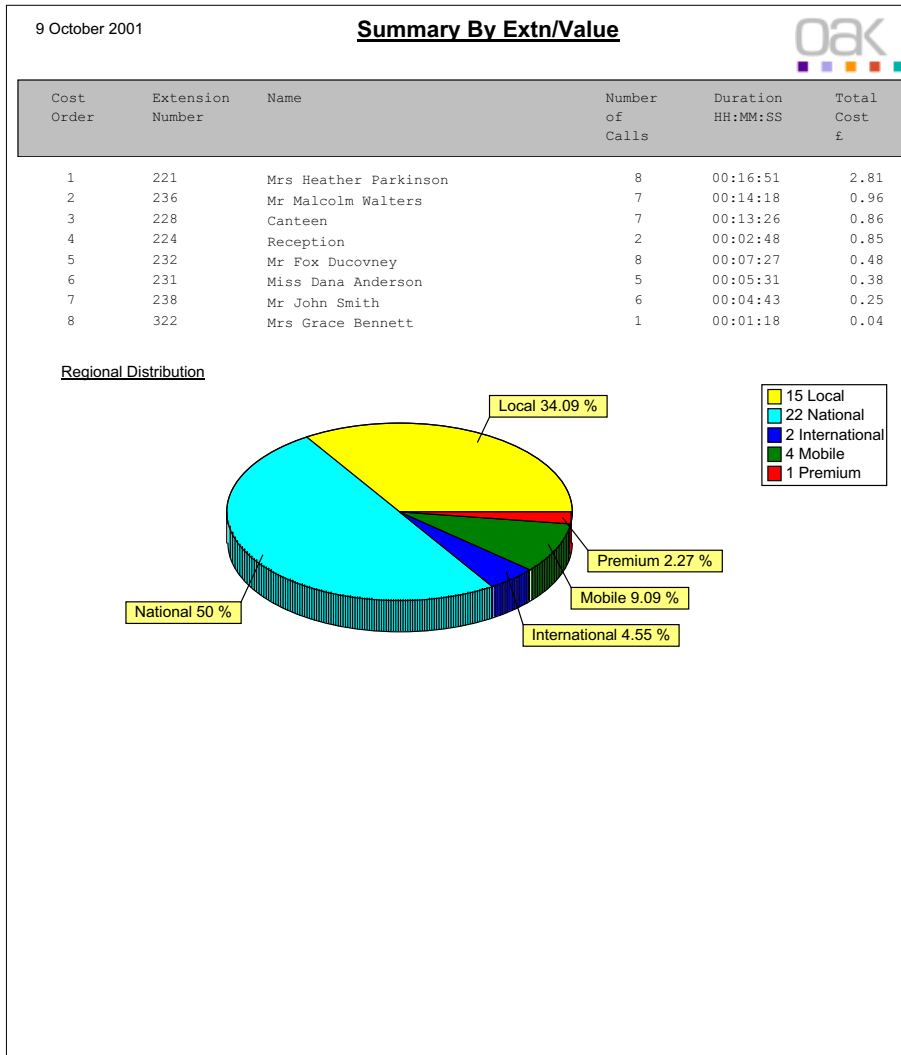
EXAMPLE REPORTS

5.30



This report continues with summary details for the office/site and company. The departmental summary (Administration Department) is in the upper shaded box in the middle of the report.

EXAMPLE REPORTS



5.31

The first of several reports which place calls, made by individual extensions within the group, in ranked order. Other reports in this series list calls by Duration and Frequency. The graph shows the differing call 'bands' (or rates) of the departmental summary.

EXAMPLE REPORTS

5.32

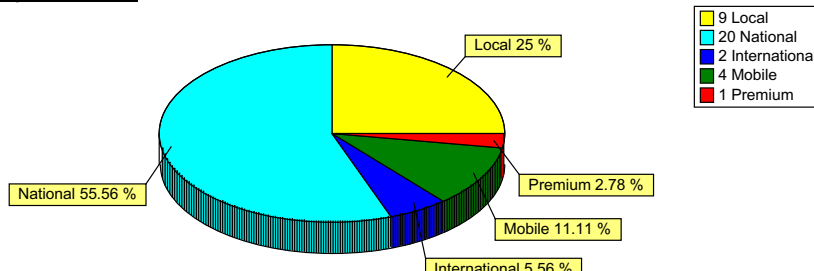
9 October 2001

Summary By Phone/Frequency



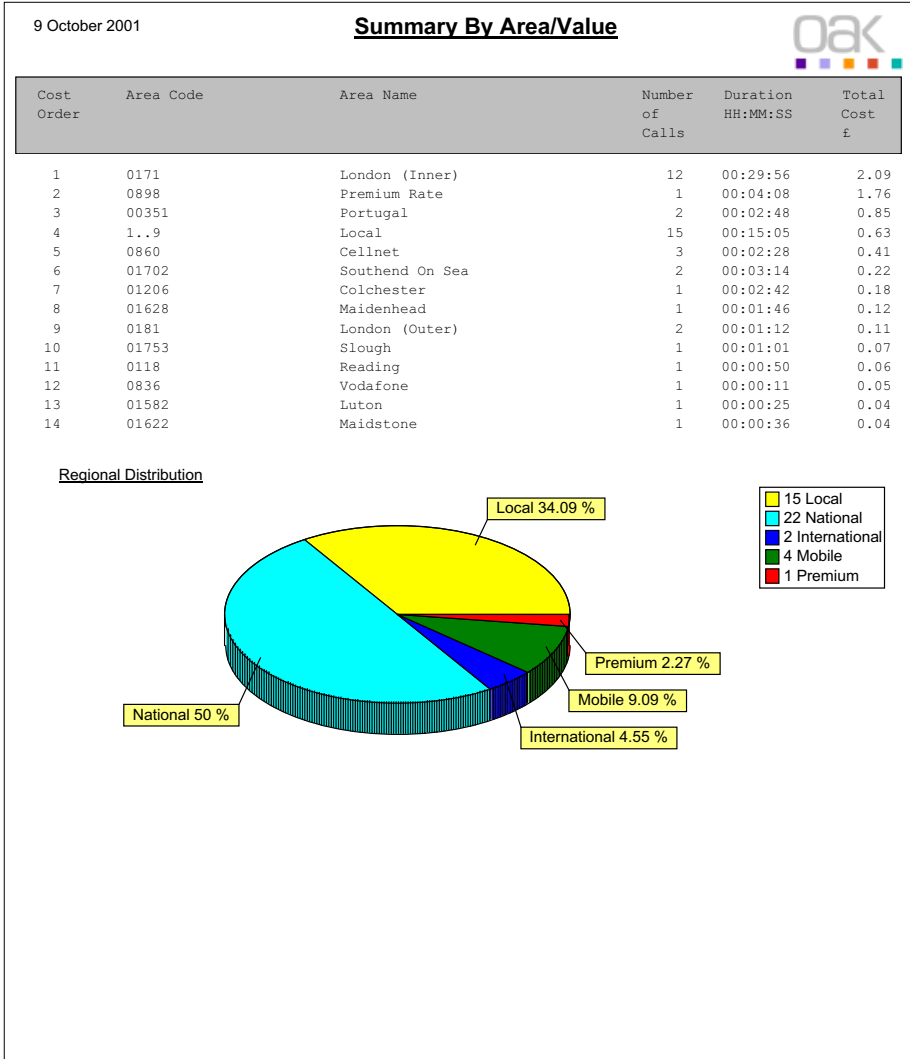
Frequency Order	Dialled Number	Area Name	Number of Calls	Duration HH:MM:SS	Total Cost £
1	01712421242	London (Inner)	3	00:08:25	0.64
2	0860254880	Cellnet	3	00:02:28	0.41
3	01702365396	Southend On Sea	2	00:03:14	0.22
4	7694945	Local	2	00:01:35	0.09
5	0898909259	Premium Rate	1	00:04:08	1.76
6	0035169632274	Portugal	1	00:01:57	0.59
7	01714177022	London (Inner)	1	00:07:20	0.49
8	01717082113	London (Inner)	1	00:06:42	0.45
9	0035169632336	Portugal	1	00:00:51	0.26
10	01206772277	Colchester	1	00:02:42	0.18
11	01718371212	London (Inner)	1	00:02:22	0.16
12	01717306060	London (Inner)	1	00:01:59	0.13
13	775052	Local	1	00:03:51	0.13
14	01628795000	Maidenhead	1	00:01:46	0.12
15	3909962	Local	1	00:02:18	0.08
16	01753833933	Slough	1	00:01:01	0.07
17	01712533000	London (Inner)	1	00:01:03	0.07
18	01818684499	London (Outer)	1	00:01:05	0.07
19	01717083403	London (Inner)	1	00:00:50	0.06
20	01189795000	Reading	1	00:00:50	0.06
21	01717825000	London (Inner)	1	00:00:44	0.05
22	6472897	Local	1	00:01:37	0.05
23	0836679603	Vodafone	1	00:00:11	0.05
24	0158248400	Luton	1	00:00:25	0.04
25	01622687031	Maidstone	1	00:00:36	0.04
26	6689215	Local	1	00:00:59	0.04
27	6613051	Local	1	00:00:27	0.04
28	7442242	Local	1	00:01:18	0.04
29	01718330126	London (Inner)	1	00:00:31	0.04
30	3982953	Local	1	00:00:43	0.04

Regional Distribution



Following on from the 'Cost Summary by Extension' series, this report shows the calls made by the Administration Department, ranked by the number of calls made to each area. This, and the other reports in this series, look at the group as a whole and not as individual extensions.

EXAMPLE REPORTS

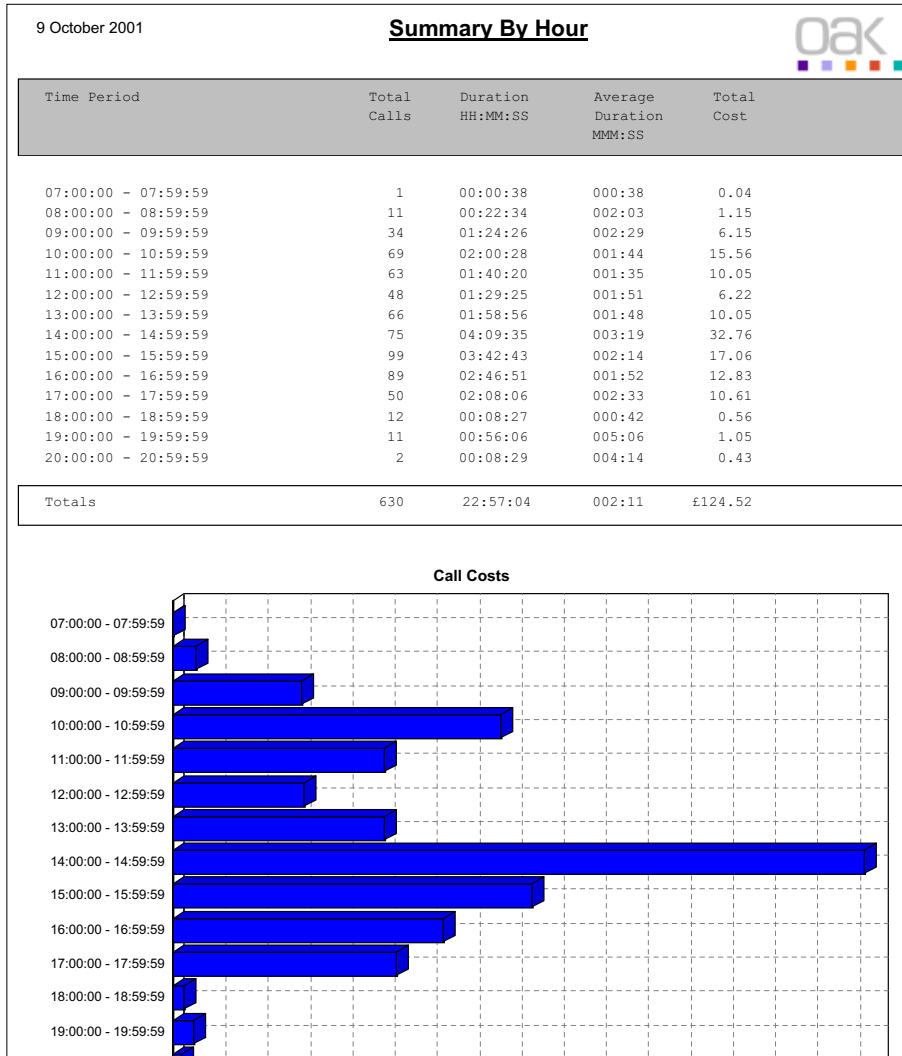


5.33

Another example of the Cost Summary range of reports, this time showing calls made by the Administration Department, ranked by cost against area.

EXAMPLE REPORTS

5.34



The Cost Summary by Hour very clearly and graphically shows the cost of calls made by the company on an hourly basis. Between 10 and 11 a.m., 69 calls were made at a cost of £15.56, whilst a greater number (99) of calls (of a longer average duration) made between 3 and 4 p.m. only cost £17.06!

ADVANCE CLASSIC - OAK

EXAMPLE REPORTS

9 October 2001							
Itemised By Extension							
oak							
Day	Date	Time	Duration	Phone Number	Region	Area Name	Rate
			HH:MM:SS				
							Cost
Thu	Oct	01	10:59	00:00:50	01717798888	N London (Inner)	DayTime 0.06
Thu	Oct	01	11:04	00:00:50	01717798888	N London (Inner)	DayTime 0.06
Thu	Oct	01	13:07	00:00:46	01992501177	N Hoddesdon	DayTime 0.05
Thu	Oct	01	13:08	00:01:10	435000	L Local	DayTime 0.04
Thu	Oct	01	13:42	00:00:28	0144261122	N Hemel Hempstead	DayTime 0.04
Thu	Oct	01	13:58	00:04:16	01780567777	N Stamford	DayTime 0.29
Thu	Oct	01	14:04	00:01:12	435000	L Local	DayTime 0.04
Thu	Oct	01	14:19	00:00:47	01638715814	N Newmarket	DayTime 0.05
Thu	Oct	01	14:21	00:00:24	92584233	L Local	DayTime 0.04
Thu	Oct	01	14:21	00:00:00	0199258	N Hoddesdon	DayTime 0.00
Thu	Oct	01	14:21	00:00:00	584875851	L Local	DayTime 0.00
Thu	Oct	01	14:22	00:00:54	01584875851	N Ludlow	DayTime 0.06
Thu	Oct	01	14:44	00:00:18	01628715814	N Maidenhead	DayTime 0.04
Thu	Oct	01	14:44	00:00:44	01638715814	N Newmarket	DayTime 0.05
Thu	Oct	01	15:44	00:00:01	702365396	L Local	DayTime 0.04
Thu	Oct	01	15:44	00:01:47	01702365396	N Southend On Sea	DayTime 0.12
Thu	Oct	01	15:47	00:00:03	663051	L Local	DayTime 0.04
Thu	Oct	01	15:52	00:00:27	6613051	L Local	DayTime 0.04
Thu	Oct	01	16:16	00:00:41	6613051	L Local	DayTime 0.04
Thu	Oct	01	16:20	00:01:27	01702365396	N Southend On Sea	DayTime 0.10
Thu	Oct	01	17:07	00:00:05	628795127	L Local	DayTime 0.04
Thu	Oct	01	17:07	00:00:00	628795127	L Local	DayTime 0.00
Thu	Oct	01	17:07	00:00:50	01189795000	N Reading	DayTime 0.06
Thu	Oct	01	17:08	00:01:46	01628795000	N Maidenhead	DayTime 0.12
Thu	Oct	01	17:12	00:02:07	01732359990	N Sevenoaks	DayTime 0.14
Thu	Oct	01	17:18	00:00:20	435000	L Local	DayTime 0.04
Thu	Oct	01	17:40	00:00:22	01689822731	N Orpington	DayTime 0.04
Total Original Calls :							30 Total Cost : £1.92
Bristol Office Extn : 234 Dr Mike Skivener							
Thu	Oct	01	09:33	00:02:09	0163540333	N Newbury (Berks)	DayTime 0.14
Thu	Oct	01	11:10	00:02:59	01905748485	N Worcester	DayTime 0.20
Thu	Oct	01	13:03	00:01:16	6867777	L Local	DayTime 0.04
Thu	Oct	01	16:58	00:02:06	01714962771	N London (Inner)	DayTime 0.14
Total Original Calls :							4 Total Cost : £0.52
Bristol Office Extn : 236 Mr Malcolm Walters							
Thu	Oct	01	10:37	00:00:44	01714394242	N London (Inner)	DayTime 0.05
Thu	Oct	01	11:08	00:03:53	00356684812	I Malta	DayTime 1.27
Thu	Oct	01	11:34	00:06:42	01717082113	N London (Inner)	DayTime 0.45
Thu	Oct	01	11:50	00:02:43	0148363093	N Guildford	DayTime 0.18

The most useful report for tracking 'exceptional' calls is 'Cost Itemised by Extension', which lists every call made by the individual extensions. In this example, only the Administration Department is being reported on. This detailed report, which only covers one day, runs to five pages, of which only part of page 4 is shown.

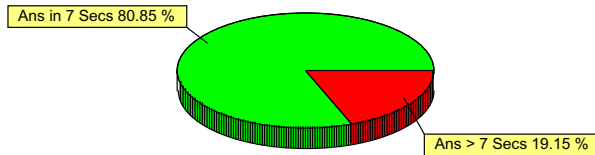
5.36

Summary By Group/Extension



Group 1	The Example Co. Ltd.
---------	----------------------

Group 2	Administration Department
---------	---------------------------

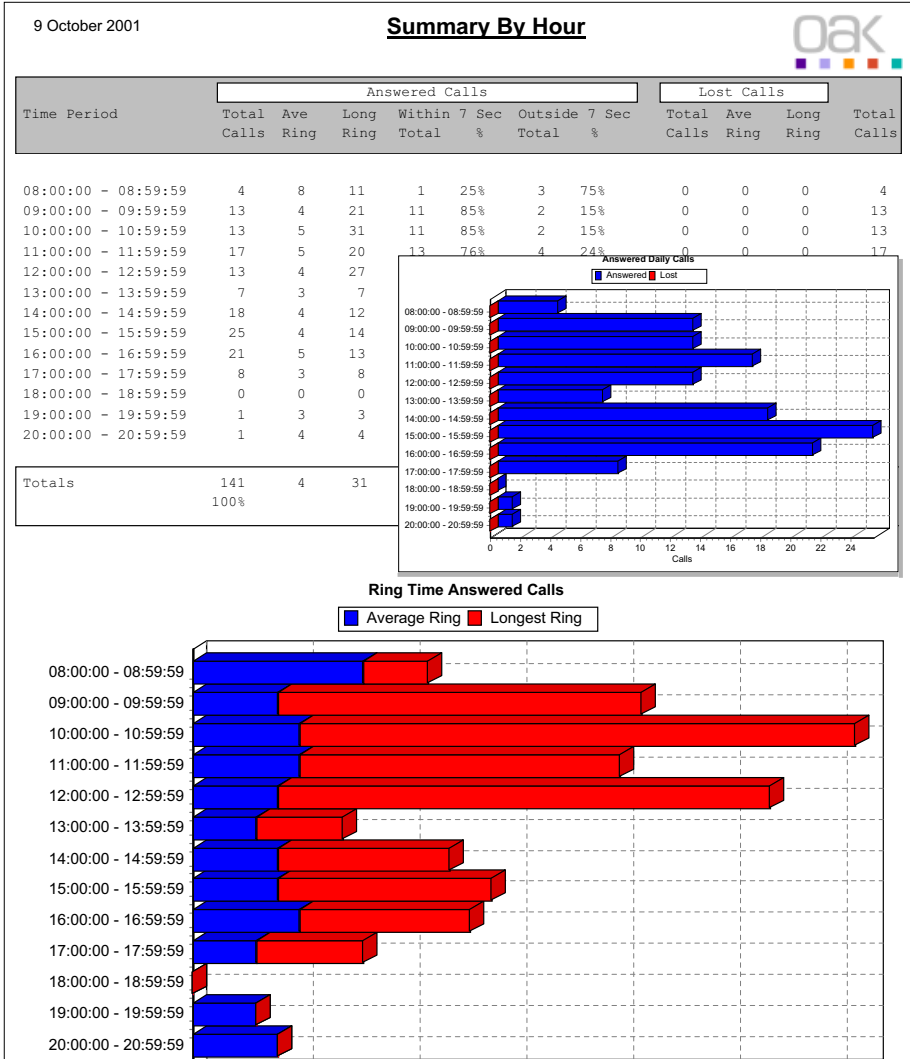
Total Call Response

Totals for Administration Department										
141	4	31	114	80	27	20	0	0	0	141
100%							0%			100%

141 Answered
0 Lost

ADVANCE CLASSIC - OAK

EXAMPLE REPORTS



5.37

The hourly Response Summary for the department clearly shows the incoming call volume and response times. The inset shows the answered and lost calls graph for the department.

EXAMPLE REPORTS

5.38

9 October 2001

Itemised By Extension

oak

Date	Time	Duration	Line	Calling	Carrier	Reply	Ring	0...15...30...45...60+
	HH:MM:SS	HH:MM:SS	/Extn	Line			Secs	
				Identifier				

Oct 01	17:02:59	00:00:23	705		BT	✓	3	■
Oct 01	17:03:56	00:00:33	705		BT	✓ trn	5	■
Oct 01	17:06:05	00:00:20	705		BT	✓ trn	4	■
Oct 01	17:13:46	00:00:20	705		BT	✓ trn	6	■
Oct 01	17:16:55	00:00:17	704		BT	✓ trn	4	■

Bristol Office	Extn : 228	Canteen
----------------	------------	---------

Oct 01	15:16:57	00:06:49	705		BT	trn ✓	0	
Oct 01	20:09:47	00:00:26	705		BT	✓ trn	4	■

Bristol Office	Extn : 231	Miss Dana Anderson
----------------	------------	--------------------

Oct 01	12:48:27	00:01:04	705		BT	trn ✓	0	
Oct 01	16:12:46	00:01:02	705		BT	trn ✓	0	

Bristol Office	Extn : 232	Mr Fox Ducovney
----------------	------------	-----------------

Oct 01	10:01:01	00:00:24	704		BT	trn ✓	0	
Oct 01	11:13:50	00:00:32	704		BT	trn ✓	0	
Oct 01	12:38:50	00:07:59	705		BT	trn ✓	0	
Oct 01	15:01:39	00:00:21	705		BT	trn ✓	0	
Oct 01	15:34:36	00:01:37	705		BT	trn ✓	0	

Bristol Office	Extn : 234	Dr Mike Skivener
----------------	------------	------------------

Oct 01	13:26:19	00:00:33	705		BT	trn ✓ trn	0	
Oct 01	17:08:25	00:02:00	705		BT	trn ✓	0	

Bristol Office	Extn : 236	Mr Malcolm Walters
----------------	------------	--------------------

Oct 01	11:00:03	00:01:09	705		BT	trn ✓	0	
Oct 01	14:17:33	00:01:59	705		BT	trn ✓	0	
Oct 01	16:19:51	00:02:28	705		BT	trn ✓	0	
Oct 01	17:20:01	00:05:55	705		BT	trn ✓	0	

Bristol Office	Extn : 238	Mr John Smith
----------------	------------	---------------

Oct 01	10:55:56	00:00:50	705		BT	trn ✓	0	
Oct 01	11:54:05	00:01:14	705		BT	trn ✓	0	
Oct 01	13:26:34	00:00:15	705		BT	trn ✓	0	
Oct 01	16:05:41	00:01:03	705		BT	trn ✓	0	
Oct 01	17:29:09	00:00:27	705		BT	✓ trn	8	■


Bristol Office	Extn : 310	Mr Gregory Peck
----------------	------------	-----------------

Oct 01	10:48:13	00:02:18	708		BT	✓	11	■
Oct 01	13:34:40	00:44:43	708		BT	✓	2	■

Reply Column Key	
✓	= Answered
x	= Not answered
L	= Lost
B	= Busy
Trns	= Transferred
Trns✓	= transferred in
✓Trns	= transferred out

As with all the Itemised reports, this one lists each call in chronological order, showing the answer time. Calls marked 'trn' are transfers. All those shown are transferred in (transfer out data cannot be gleaned from this particular switch type).

EXAMPLE REPORTS

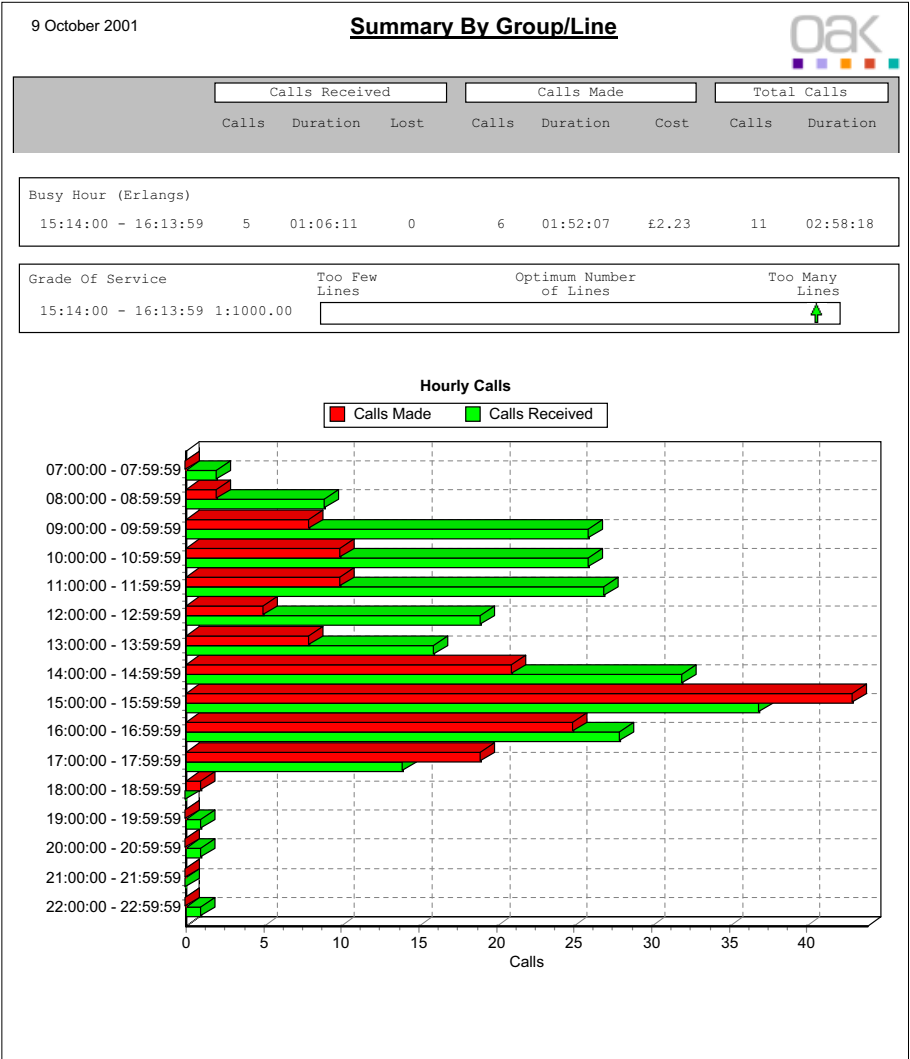
9 October 2001			Summary By Group/Line						
Calls Received			Calls Made			Total Calls			
Calls	Duration	Lost	Calls	Duration	Cost	Calls	Duration		
Bristol Office - BT Group									
Line : 700	13	00:15:58	0	0	00:00:00	0.00	13	00:15:58	
Line : 701	0	00:00:00	0	0	00:00:00	0.00	0	00:00:00	
Line : 702	0	00:00:00	0	0	00:00:00	0.00	0	00:00:00	
Line : 703	5	00:23:53	0	16	01:02:00	3.33	21	01:25:53	
Line : 704	9	00:12:21	1	0	00:00:00	0.00	9	00:12:21	
Line : 705	53	01:57:59	2	0	00:00:00	0.00	53	01:57:59	
Line : 706	2	00:01:22	0	5	00:11:06	0.83	7	00:12:28	
Line : 707	7	00:08:14	0	0	00:00:00	0.00	7	00:08:14	
Line : 708	7	01:06:44	0	0	00:00:00	0.00	7	01:06:44	
Line : 709	3	00:04:47	0	11	00:14:19	0.74	14	00:19:06	
Line : 710	51	02:35:25	2	0	00:00:00	0.00	51	02:35:25	
Line : 711	16	00:36:37	0	0	00:00:00	0.00	16	00:36:37	
Line : 712	3	00:09:37	0	0	00:00:00	0.00	3	00:09:37	
Line : 713	34	01:06:19	1	45	01:06:15	12.14	79	02:12:34	
Line : 714	16	00:46:36	0	0	00:00:00	0.00	16	00:46:36	
Line : 715	19	00:25:33	1	0	00:00:00	0.00	19	00:25:33	
Line : 716	0	00:00:00	0	26	00:42:05	2.55	26	00:42:05	
Line : 717	1	00:00:49	0	0	00:00:00	0.00	1	00:00:49	
Line : 718	0	00:00:00	0	49	02:09:46	10.70	49	02:09:46	
Line : 719	0	00:00:00	0	0	00:00:00	0.00	0	00:00:00	
Activity and totals for 20 Bristol Office - BT Group Lines									
07:00:00 - 07:59:59	2	00:01:28	2	0	00:00:00	0.00	2	00:01:28	
08:00:00 - 08:59:59	9	00:11:33	0	2	00:04:55	0.61	11	00:16:28	
09:00:00 - 09:59:59	26	01:06:11	0	8	00:21:07	0.74	34	01:27:18	
10:00:00 - 10:59:59	26	01:09:45	1	10	00:19:22	1.92	36	01:29:07	
11:00:00 - 11:59:59	27	00:51:01	1	10	00:19:36	1.89	37	01:10:37	
12:00:00 - 12:59:59	19	00:45:15	1	5	00:10:16	0.45	24	00:55:31	
13:00:00 - 13:59:59	16	01:14:47	0	8	00:27:01	2.10	24	01:41:48	
14:00:00 - 14:59:59	32	01:21:01	0	21	00:33:32	4.12	53	01:54:33	
15:00:00 - 15:59:59	37	01:06:24	0	43	01:47:01	8.90	80	02:53:25	
16:00:00 - 16:59:59	28	01:12:53	1	25	00:47:30	5.52	53	02:00:23	
17:00:00 - 17:59:59	14	00:41:52	1	19	00:34:09	3.85	33	01:16:01	
18:00:00 - 18:59:59	0	00:00:00	0	1	00:01:02	0.19	1	00:01:02	
19:00:00 - 19:59:59	1	00:07:42	0	0	00:00:00	0.00	1	00:07:42	
20:00:00 - 20:59:59	1	00:01:27	0	0	00:00:00	0.00	1	00:01:27	
21:00:00 - 21:59:59	0	00:00:00	0	0	00:00:00	0.00	0	00:00:00	
22:00:00 - 22:59:59	1	00:00:55	0	0	00:00:00	0.00	1	00:00:55	
	239	09:52:14	7	152	05:25:31	£30.29	391	15:17:45	

5.39

The pictures on this and the following page show part of the 'Traffic Summary by Group/Line' report. Only lines 700 to 719 (half the total number) are shown in this example.

EXAMPLE REPORTS

5.40




The graphs (not shown) on the last two pages of this report show the 'Total Hourly Duration of Calls' and 'Trunk Usage' for the twenty lines being reported on.

EXAMPLE REPORTS

9 October 2001

Summary By Group/Extn



Incoming Calls			Outgoing Calls		
Answered Calls	Duration HH:MM:SS	Unanswered Calls	Total Calls	Duration HH:MM:SS	Total Cost
Group 1 The Example Co. Ltd.					
Group 2 Administration Department					
Bristol Office	Extn : 221	Mrs Heather Parkinson			
106	01:09:23	0	43	01:11:39	6.80
Bristol Office	Extn : 224	Reception			
0	00:00:00	0	20	00:23:21	6.72
Bristol Office	Extn : 228	Canteen			
2	00:07:15	0	23	00:49:10	2.01
Bristol Office	Extn : 231	Miss Dana Anderson			
2	00:02:06	0	36	00:30:00	2.11
Bristol Office	Extn : 232	Mr Fox Ducovney			
5	00:10:53	0	30	00:27:38	1.92
Bristol Office	Extn : 234	Dr Mike Skivener			
2	00:02:33	0	4	00:08:30	0.52
Bristol Office	Extn : 236	Mr Malcolm Walters			
4	00:11:31	0	21	00:40:55	3.65
Bristol Office	Extn : 238	Mr John Smith			
5	00:03:49	0	13	00:11:11	0.80
Bristol Office	Extn : 310	Mr Gregory Peck			
6	01:06:21	0	2	00:04:02	0.18
Bristol Office	Extn : 322	Mrs Grace Bennett			
9	00:17:18	0	6	00:05:32	0.31
Totals for Administration Department					
141	03:11:09	0	198	04:31:58	£25.02
Totals for The Example Co. Ltd.					
141	03:11:09	0	198	04:31:58	£25.02

5.41

'Traffic Summary by Group/Extension' shows both the incoming and outgoing calls for each extension in the Administration Department.

EXAMPLE REPORTS

9 October 2001

Itemised By Time




Date	Time	Site Code	Type Of Extn/Call Line	From Extn/Line	To Extn/Line	Duration HH:MM:SS	Ring Secs	Answ Call	Trans Call	Phone Number	Account Code	Cost £
Oct 01	08:29:21	1	Inc	L 710	E 221	00:00:35	11	Yes	No		000237	0.00
Oct 01	08:32:42	1	Inc	L 710	E 221	00:00:53	10	Yes	No		000456	0.00
Oct 01	08:52:00	1	Inc	L 710	E 221	00:01:02	8	Yes	No		000237	0.00
Oct 01	08:59:08	1	Inc	L 705	E 221	00:01:36	3	Yes	No		000237	0.00
Oct 01	09:04:42	1	Out	E 221	L 723	00:01:05	11	---	No	0831329509	000019	0.19
Oct 01	09:17:38	1	Inc	L 700	E 221	00:00:42	3	Yes	No		000123	0.00
Oct 01	09:21:48	1	Inc	L 705	E 221	00:00:30	3	Yes	No		000123	0.00
Oct 01	09:25:31	1	Inc	L 714	E 221	00:01:22	6	Yes	Term		000456	0.00
Oct 01	09:26:33	1	Inc	L 705	E 221	00:00:44	21	Yes	No		000123	0.00
Oct 01	09:28:07	1	Inc	L 714	E 322	00:01:14	0	Yes	Init		000456	0.00
Oct 01	09:28:25	1	Inc	L 700	E 221	00:00:11	2	Yes	Term		000123	0.00
Oct 01	09:29:20	1	Inc	L 705	E 221	00:00:47	1	Yes	No		000111	0.00
Oct 01	09:29:25	1	Out	E 322	L 730	00:01:36	12	---	No	01305251888	000421	0.11
Oct 01	09:30:19	1	Inc	L 729	E 221	00:00:31	2	Yes	Term		000421	0.00
Oct 01	09:30:50	1	Inc	L 705	E 221	00:01:07	2	Yes	Term		000123	0.00
Oct 01	09:33:57	1	Out	E 234	L 739	00:02:09	11	---	No	0163540333	000111	0.14
Oct 01	09:38:29	1	Out	E 322	L 739	00:01:11	10	---	No	8787777	000421	0.04
Oct 01	09:40:43	1	Out	E 232	L 739	00:01:29	11	---	No	0144261122	000237	0.10
Oct 01	09:43:44	1	Inc	L 729	E 221	00:00:47	6	Yes	Term		000123	0.00
Oct 01	09:45:58	1	Out	E 322	L 723	00:00:33	10	---	No	8787777	000421	0.04
Oct 01	09:46:55	1	Inc	L 714	E 221	00:00:56	6	Yes	Term		000123	0.00
Oct 01	09:51:52	1	Inc	L 729	E 221	00:00:29	2	Yes	No		000456	0.00
Oct 01	09:54:28	1	Out	E 221	L 723	00:00:45	9	---	No	777117	000237	0.04
Oct 01	09:59:57	1	Inc	L 705	E 221	00:00:28	8	Yes	No		000456	0.00
Oct 01	10:01:01	1	Inc	L 704	E 232	00:00:24	0	Yes	Init		000123	0.00
Oct 01	10:03:10	1	Out	E 224	L 739	00:00:38	12	---	No	0035169632274	000111	0.19
Oct 01	10:04:04	1	Out	E 224	L 730	00:00:53	12	---	No	0035169632274	000456	0.27
Oct 01	10:05:13	1	Out	E 224	L 739	00:03:00	12	---	No	0035169632274	000456	0.91
Oct 01	10:08:28	1	Out	E 224	L 723	00:00:28	12	---	No	0035169632336	000123	0.14
Oct 01	10:09:11	1	Out	E 224	L 739	00:00:44	12	---	No	0035169633039	000456	0.22
Oct 01	10:10:10	1	Out	E 224	L 723	00:00:30	12	---	No	0035169632336	000456	0.15
Oct 01	10:10:55	1	Out	E 224	L 739	00:00:29	12	---	No	0035169632274	000123	0.15
Oct 01	10:11:39	1	Out	E 224	L 723	00:00:30	12	---	No	0035169632336	000123	0.15
Oct 01	10:13:46	1	Out	E 224	L 723	00:03:44	12	---	No	004631440680	000421	0.90
Oct 01	10:16:04	1	Inc	L 715	E 221	00:00:18	2	Yes	No		000456	0.00
Oct 01	10:19:19	1	Inc	L 705	E 221	00:00:22	3	Yes	Term		000000	0.00
Oct 01	10:22:48	1	Out	E 224	L 739	00:02:51	12	---	No	0035169632274	000237	0.86
Oct 01	10:23:56	1	Inc	L 705	E 221	00:00:28	7	Yes	Term		000123	0.00
Oct 01	10:26:12	1	Out	E 224	L 739	00:01:32	12	---	No	0035169632336	000456	0.46
Oct 01	10:29:07	1	Out	E 224	L 723	00:00:16	12	---	No	0035169632274	000456	0.08
Oct 01	10:29:38	1	Out	E 224	L 739	00:00:16	12	---	No	0035169632274	000237	0.08
Oct 01	10:30:09	1	Out	E 224	L 730	00:00:11	12	---	No	0035169632336	000421	0.06
Oct 01	10:30:34	1	Out	E 224	L 723	00:00:30	12	---	No	01189632336	000456	0.04
Oct 01	10:31:35	1	Out	E 224	L 718	00:00:51	12	---	No	0035169632336	000111	0.26

Every call in and out of the Administration Department is shown on the 'Traffic Itemised by Time' report. This is the first of a 7-page report for the single day being reported on.

ADVANCE CLASSIC - OAK

EXAMPLE REPORTS

9 October 2001		<u>Summary By Client</u>					
Account Code	Account Name	Total Calls Received	Total Calls Made	Prof Cost	Call Cost	Total Cost	
00000	Grunge Bulger & Co.	251	496	0.00	98.08	98.08	
000019	Rankin & Holder Ltd	0	1	0.00	0.19	0.19	
000111	Grahamson Fabrications	4	7	0.00	1.04	1.04	
000123	Ricks, Hasting & Bennett	31	24	0.00	6.00	6.00	
000237	Joshua Grimthorpe & Son	17	38	0.00	6.17	6.17	
000421	Staveley Johnson Peel	19	30	0.00	5.57	5.57	
000456	Nilson Carburundum Ltd.	19	34	0.00	7.47	7.47	
Totals :		341	630	£ 0.00	£124.52	£124.52	
		Tandem Calls:	0				

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'Accounts' within Advance are clients of our fictitious company who are charged for phone time. This feature is particularly useful, for example, to accountants or solicitors who pass on the cost of calls to their clients. Clients can be charged at a fixed rate per call, an hourly rate...

EXAMPLE REPORTS

5.44

9 October 2001						
<u>Itemised By Account/Extension</u>						
oak						
Day Date	Time Call Type	Duration HH:MM:SS	"Phone Number",	Prof Cost	Call Cost	Total Cost
Thu Oct 01	20:09 Incoming	00:00:30		0.00	0.00	0.00
Outgoing : 7 Incoming : 1				£0.00	£0.86	£0.86
Bristol Office Extn : 231 Miss Dana Anderson						
Thu Oct 01	12:48 Incoming	00:01:04		0.00	0.00	0.00
Thu Oct 01	14:01 Outgoing	00:00:36	0158248400	0.00	0.04	0.04
Thu Oct 01	14:36 Outgoing	00:01:17	01818684499	0.00	0.07	0.07
Thu Oct 01	15:48 Outgoing	00:01:15	01712533000	0.00	0.07	0.07
Thu Oct 01	16:03 Outgoing	00:00:48	01622687031	0.00	0.04	0.04
Thu Oct 01	16:12 Incoming	00:01:02		0.00	0.00	0.00
Thu Oct 01	16:38 Outgoing	00:02:34	01718371212	0.00	0.16	0.16
Outgoing : 5 Incoming : 0				£0.00	£0.38	£0.38
Bristol Office Extn : 232 Mr Fox Ducovney						
Thu Oct 01	12:38 Incoming	00:07:59		0.00	0.00	0.00
Thu Oct 01	13:08 Outgoing	00:01:19	435000	0.00	0.04	0.04
Thu Oct 01	14:21 Outgoing	00:00:10	584875851	0.00	0.00	0.00
Thu Oct 01	15:01 Incoming	00:00:21		0.00	0.00	0.00
Thu Oct 01	15:34 Incoming	00:01:37		0.00	0.00	0.00
Thu Oct 01	15:44 Outgoing	00:01:59	01702365396	0.00	0.12	0.12
Thu Oct 01	15:52 Outgoing	00:00:37	6613051	0.00	0.04	0.04
Thu Oct 01	16:20 Outgoing	00:01:39	01702365396	0.00	0.10	0.10
Thu Oct 01	17:07 Outgoing	00:00:10	628795127	0.00	0.00	0.00
Thu Oct 01	17:07 Outgoing	00:01:02	01189795000	0.00	0.06	0.06
Thu Oct 01	17:08 Outgoing	00:01:58	01628795000	0.00	0.12	0.12
Outgoing : 8 Incoming : 0				£0.00	£0.48	£0.48
Bristol Office Extn : 234 Dr Mike Skivener						
Thu Oct 01	13:26 Incoming	00:00:33		0.00	0.00	0.00
Thu Oct 01	17:08 Incoming	00:02:00		0.00	0.00	0.00
Outgoing : 0 Incoming : 0				£0.00	£0.00	£0.00
Bristol Office Extn : 236 Mr Malcolm Walters						
Thu Oct 01	11:34 Outgoing	00:06:54	01717082113	0.00	0.45	0.45
Thu Oct 01	14:17 Incoming	00:01:59		0.00	0.00	0.00
Thu Oct 01	14:45 Outgoing	00:02:54	01206772277	0.00	0.18	0.18
Thu Oct 01	15:16 Outgoing	00:00:49	4598031	0.00	0.04	0.04

...per call or even the call charge plus a percentage uplift. Here you can see the 'Itemised by Extension' form of an Account report. In all these reports, calls made and calls received are listed separately.

ADVANCE CLASSIC - OAK

EXAMPLE REPORTS

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ADVANCE CLASSIC - OAK

Chapter Six

QUESTIONS ANSWERED

6.1

Glossary of terms

486	Intel CPU chip family now superseded by the Pentium range. Two basic forms were made; the SX, which was the 'cut-down' version, and the DX, which was the 'full-sized' chip. Properly speaking, the 486 was the last of the x86 group of processors, which started with the 8088 & 8086, found in the original IBM PC (Personal Computer).
ACD	Automatic Call Distribution. A method of evenly distributing incoming calls within a group of 'agents'. Analogue Transmission of information using waves without intermediate steps. Analogue signals have continuous values.
APNSS	Analogue Private Network Signalling System
Application	Another name for an item of software, written to perform a specific task.
ASCII code	American Standard Code for Information Interchange. A 7-bit code that encodes 32 control characters, plus 96 alphanumeric characters (A to Z, 0 to 9 plus symbols).
ADSL	Asymmetrical Digital Subscriber Line. A data transport system, using normal copper wires with two channels, one for upstream and the other for downstream.
AT	Advanced Technology. The IBM successor to the PC/XT with a 80286 CPU and 16-bit bus slots.
ATM	Asynchronous Transfer Mode. A transmission and switching technique, capable of supporting voice, video and data communications. Each piece of information is addressed and is of the same length. This allows very high-speed communications.
Barrier Box	A device that de-couples the phone switch from the computer used to collect the call data for reasons of safety. The unit is fitted with LED's (Light Emitting Diode) to indicate status. (see page 2.5)

Baud Rate	The number of state changes of a given transmission speed. For data transmission, this is normally equal to the number of (transmitted) bits per second.
Bit	Abbreviation for Binary Digit. A bit can only show two different conditions (or states). These are normally named 0 and 1 or 0 and L.
BNC	A special plug for connecting co-axial cables transmitting high frequency signals often used in networks.
bps	See Baud Rate
Break in	The ability to dial directly into a local PBX (Private Branch Exchange) and then across a private network or PBX system from an external exchange line.
Break out	The ability to dial across a private network and then to access an exchange line at a suitable terminal PBX in order to enable the call to be charged at the 'local rate'.
BRI	Basic Rate Interface. The standard ISDN line, consisting of 2 B channels for data and 1 D channel for signalling. Also known as ISDN 2e, or sometimes 2B+D.
Bus	A number of generally parallel signal lines which transmit control, data, and address signals.
Busy hour	The continuous 60 minute period during any measurable period when the calls handled by the system is at maximum.
Byte	The basic unit for measuring data storage. A byte consists of a group of 8 bits.
Call centre	A Call Centre is a business function, usually comprising a set of agent groups, dedicated to servicing telephone transactions.
CCITT	Comité Consultatif Internationale de Télégraphique et Téléphonique, an international committee, part of the UN, which sets mandatory standards for telecommunication services.
Channel	A standard ISDN line consisting of 3 channels. See ISDN (This is a BT definition!).

CIL or CILE	Call Information Logging (Equipment). The actual process of storing and processing call information.
CLI	Calling Line Identity. Most UK inland telephone exchanges are able to send the caller's number when a call is made. This feature is not always present on calls from mobile phones or overseas calls.
CMS	Call Management System
COL files	Oak Telecom 'raw' data files. Each file normally contains all the call logging output from the switch for one 24-hour period.
COM Port	The DOS name for the various serial interfaces in a PC. COM is derived from communications port.
CPU	Central Processing Unit. The CPU is the heart of the computer, and is also often called the (central) processor. Examples are the Intel x86 family and the Motorola 68000.
CSV	Comma Separated Variable. A file format which is compatible with most spreadsheets (Excel, Quattro, Lotus, etc.) and many databases. This file format is used by the optional Advance CMS module, Export to Spreadsheet.
CTI	Computer Telephone Integration. The ability to inter-work phone switches with computer systems. This link between computers and telephony has many other names including CSTS, CAT, CIT and iCAT.
DASS	Digital Access Signalling System. A (UK) public network standard developed by BT. The current version is DASS2.
DDI	Direct Dialling Inwards. Enables some digital switches to receive dialled numbers directly from the trunk interface.
Digital	Transmission of data using binary (0 & 1). A digital signal viewed with an oscilloscope is in the form of a square wave.
Digital PowerLine	A system of data transport using electricity power lines, developed by Nortel.

Dongle	A software protection device connected between the computer and printer. Also known as a Software Protection Key.
DOS	Disk Operating System. The most-installed operating system for IBM-compatible PC's. MS-DOS only operates in the x86 real mode.
DPNSS	Digital Private Network Signalling System. A private networking standard developed by BT and other PBX suppliers which allows full feature access to be provided between PBX's in private networks.
DTMF	Dual Tone Multifrequency. Signalling which is the basis of the operation of push-button telephone sets. Dialed numbers are transmitted as tones rather than electronic pulses.
Erlang	A unit of phone traffic intensity. 1erlang \equiv one line occupied solidly for one hour \equiv to 36 Hundred Call Seconds. See HCS.
Ethernet	A local area network developed by Xerox in 1976. Data transfer rate reaches up to 10 Mbits/s.
FAT16	A hard disk file system (file allocation table) developed by Microsoft for DOS. DOS, OS/2, Windows 3.x, Windows 95/98 and NT can use hard disk partitions formatted with the FAT16 file system.
FAT32	(see also FAT16) A later version of the hard disk file allocation system developed by Microsoft for later versions of Windows 95 & Windows 98. FAT32 is far more efficient in its usage of hard disk space, however it is not compatible with NT or earlier versions of Windows or DOS.
Floppy Disk	A data carrier, which consists of a magnetically coated circular disk, made of a flexible material, contained in a protective case. Older PC's used a 5¼" floppy disks, whilst modern systems use the 3½" size. Older 3½" disks had a capacity of 720 kbytes, however 1.44 Mbytes is the current standard.
Floppy Drive	A drive to read and write floppy disks.

Gateway	A method of interpreting differing protocols between disparate computer and telephone systems is often required. These interpretations can be performed on a gateway.
GB	See Gigabyte
Gigabyte	2 ³⁰ bytes. A measure of memory, based on giga (1,000,000,000) but actually 1,073,741,824 bytes.
Group	A collection of individual items which naturally belong together. A group can be a collection of trunk lines, telephone extensions, telephone agents, etc.
Hard Disk	A drive for data storage, which uses a stiff, magnetically coated data carrier, in the form of a fast rotating disk. These data carrying disks are located in a hard case, normally hermetically sealed to keep out dust and other pollutants.
HCS	Hundred Call Seconds. A unit of traffic intensity equal to the average number of calls per hour assuming a mean holding time of 100 seconds. Also known as CCS. 36 HCS are equivalent to 1 erlang.
I/O	Input/Output
IDE	Intelligent Drive Electronics. A standard for connecting intelligent hard disks or other drives with an embedded controller to the AT bus.
IRQ	Interrupt Request. A line or signal which is activated by a peripheral to issue a hardware interrupt to the CPU.
ISA	Industry Standard Architecture. A defined standard, which has replaced the vague AT bus specification. ISA defines the bus structure, the architecture of the CPU and support chips, and the clock frequency of the ISA bus.
ISDN	Integrated Services Digital Network. A telecommunications network able to carry voice, data and video. A Basic Rate ISDN line is configured using 2 x 64 kilobit-per-second B channels and one 16 kbit/s D channel which carries signalling information. The 2 B channels

	can each be used for voice or data transmission.
ISDN 2e	The standard ISDN line, consisting of 2 B channels for data and 1 D channel for signalling. Also known as a Basic Rate Interface.
ISO	International Standards Organisation. Technical agency of the UN concerned with international standardisation in a broad range of industries.
ITU	International Telecoms Union. Telecoms agency of the UN concerned with international standardisation in telecommunications.
Kbps or kbit/s	Kilobits per second. A measure of data transmission speed. ISDN B channels are 64 kbit/s each.
Kilobyte	2 ¹⁰ bytes. A measure of memory, based on kilo (1000) but actually 1024 bytes.
LAN	Local Area Network. A network providing facilities for user communications within a defined area, usually a building or plant.
Leased line	A dedicated circuit, supplied by the PTT or other licensed operator, which permanently connects two or more locations, and is for the sole use of the subscriber.
Line	An alternative name for a telephone circuit, capable of transmitting signals in two directions at once.
Line Box	The (BT) phone socket inside your home or office, which is connected to the local telephone exchange.
Line Driver	A device for boosting signals where an excessively long cable run has been employed.
LPT port	DOS name for the various parallel interfaces in a PC. LPT is derived from line printer .
MAPI	Messaging Application Programming Interface. A Microsoft Windows interface.
MB	See Megabyte
MDF	Main Distribution Frame. A wiring arrangement that connects outside lines on one side an internal lines from exchange equipment on the other.

Megabyte	2 ²⁰ bytes. A measure of memory, based on mega (1,000,000) but actually 1,048,576 bytes.
MHz	A measure of a signal frequency equal to 1,000,000 Hz (or cycles per second). Computer 'speed' is measured in MHz.
Microsoft NT4	Microsoft New Technology Version 4. A 32-bit multi-tasking (able to perform a number of tasks at the same time) Graphical User Interface (GUI) written by Microsoft. Similar in appearance to Windows 95 but with superior networking facilities and far greater security built-in.
Microsoft Windows	A 'user friendly' GUI (Graphical User Interface) created by Microsoft to act as a 'buffer' between the user and the computer operating system. In the earlier versions of Windows, this operating system was DOS. Windows 95 still retains some vestiges of DOS. However, with future developments, this will disappear. Windows 95 is a 32-bit system, whilst Windows 3.x (and earlier versions) were 16-bit.
Modem	Modulator – Demodulator unit. This device connects your computer to the telephone network. It converts digital signals into audio tones, which can be carried on analogue circuits. When receiving, the modem converts the tones back into digital signals.
Network	One or more computers linked together. Also a communications link for users between different geographical locations.
Network Card	(or Network Adaptor) A hardware device, usually in the form of an adaptor fitted within the computer, which connects the computer to a network.
Night service	The period outside normal working hours when the switch is either directing or overflowing calls to another answering point, frequently a voice mail system, answering service / machine or night operator. When a switch is put into night service the ringing system is often changed to reflect this.
Novell	An American company which specialises in network

QUESTIONS ANSWERED

	protocols and systems. Also the name given to networks running under Novell software control.
NT	See Microsoft NT4
NTFS	New Technology File System. A hard disk file allocation table, which is only usable under NT. It is far more efficient in the use of disk space but is incompatible with Windows file allocation tables!
PABX	Private Analogue Branch Exchange. Older switches used an analogue form of operation, however these have (mostly) been superseded by digital types, known as PBX (private Branch Exchange) or PDBX (Private Digital Branch Exchange).
Parallel Port	A PC interface (usually used for connecting printers, etc.) which provides or receives data in the parallel form of one byte.
PBX	Private Branch Exchange. A private telephone switch used in office or industrial environments. The computer running Oak Telecom's Advance connects to a PBX.
PCI	Peripheral Component Interconnect. A local bus standard initiated by Intel having a bus width of usually 32-bits and operating at 33 MHz at the most. A 64-bit version, with the standard 2.0 is intended. Characteristics of PCI is the decoupling of the processor and expansion bus by means of a bridge. The transfer rate reaches 133 Mbytes/s at 32 bits and 266 Mbytes/s at 64 bits; bursts are carried out with any length. Unlike the (older) VL bus, PCI is specified processor-independent.
Pentium	The current Intel processor family, which succeeded the 486.
Peripheral	A device or unit located outside the system's CPU / main memory.
Port	An address in the x86 I/O (In/Out) address space. Usually, registers in peripherals are accessed via ports, e.g. printers, mice, etc.

PRI	Primary Rate Interface. A PRI provides for 30 B channel and 2 D channels (30B+2D). See BRI and ISDN.
Printer Port	An address on the computer In/Out system, normally linked to a connector on the back of a computer where the printer is plugged-in.
Protocol	The language of (external) computer communications.
PS/2	An IBM personal computer series with microchannel architecture, produced as the successor to the AT. PS/2 is also applied to a 6-pin connector used to connect keyboards, mice and other pointing devices to the computer. The PS/2 socket is directly connected to the internal bus and therefore does not take up valuable serial connectors.
PSTN	Public Switched Telephone Network. The public telephone system, including telephone, local and trunk lines, and exchanges.
PTT	Postal, Telegraph and Telephone Organisation. A government department responsible for, and with authority over postal, telegraph and telephone operations.
PW	Private Wire
RAM	Random Access Memory. This is the memory used by the computer whilst it is working, to hold the operating system, programs being run and program data. This type of memory is 'volatile', that is to say the contents of the memory chips is lost when the computer is switched off! Memory is measured in Megabytes (MB).
Router	A device which connects two or more networks. It determines where the destination computer is located, and then finds the best way to make the connection.
RS-232C	Standard for serial data exchange, set by the EIA (Electronic Industries Association). In Europe this standard is called V.24, published by CCITT. See page 6.13 for details of pin usage.

QUESTIONS ANSWERED

SCSI	Small Computer Systems Interface. An high-level interface for external mass storage.
Serial Port	A connection (usually via a 25 or 9-pin connector) enabling data to be exchanged between electronic devises. The standard applied to serial ports is normally RS-232C. See page 6.13 for details of pin usage.
SMDR	Station Message Detail Reporting (or Recording). The call logging output from the telephone switch.
Switch	Another name for a Telephone system or private exchange.
TCP/IP	Transmission Control Protocol / Internet Protocol.
TEL files	A proprietary file format used by Oak Telecom for the storage of monthly call records. The daily COL (or collect) files are processed every 24 hours, and the call data added to the monthly TEL file. The TEL file is used as the basis for Advance Reporting.
Terminal Adaptor	The device, which is located at the end of an ISDN, line.
Trunk	An individual circuit, provided by either a public network operator or via a private network capable of carrying an individual call.
Trunk Group	A group of individual circuits gathered together.
UART	Universal Asynchronous Receiver Transmitter. An intelligent microchip for serial interfaces, which carries out the serialisation of parallel data and the separation of start, parity and stop bits.
UCD	Uniform Call Distribution. A method of evenly distributing incoming calls within a group of 'agents'.
Uplift	The raising of a call charge by a pre-determined amount, usually as a percentage of the original cost.
WAN	Wide Area Network. Unlike a LAN, which is limited in size, usually either to a single building or site, a Wide Area Network covers a much larger geographical area. In many cases, WAN's can be a collection of LAN's linked together by leased lines or modems. The Internet is a WAN.

Frequently asked questions

The following questions are those most frequently asked of our Customer Service Centre. Please do check these first before contacting us with a problem.

6.13

When I run reports for a certain time period, the message 'No Calls Found' appears in the centre of the screen.

- The most common reason is the setting-up of mutually-exclusive analysis criteria when running a report. Please check the criteria settings.
- Has the data been **Converted** for that period of time? Run Advance Convert **manually** (see page 4.7) and then run the reports again.
- Has the **Collect** software been running for that period? Make sure no-one has turned the computer off for any reason. Check to see if Advance **Collect** is running on the machine (see page 4.5).
- Is the computer **Hard Disk** full? To check the amount of free space left on the hard disk, open '**My Computer**' on the desktop. Select the hard disk where the Advance call data files are stored and **right-click** the mouse to open the context sensitive menu. Select the '**Properties**' entry (usually the bottom item) which will display the memory status of the disk.
- Is there data in your **COL** files? Use **Explorer** and **WordPad** to look at the COL files for that period (see pages 4.5 & 4.6).
- When a call is ended, does the **Barrier** light flash, with the numbers within the **Collect** brackets (**000**) changing?
- Is the **Barrier Box** plugged in correctly into the PC and the switch? Look at the lights on the box to ensure call data is being passed to the PC (see page 4.4). If data is not being passed, check that the connections haven't been disturbed and that the switch is still outputting call data. The **lights** on the **Barrier Box** will help to determine the **status** of the link from switch to PC.

How do I customise the reports to suit my particular circumstances?

- See page **5.17** for details of report customisation.

How do I set-up a group of extension numbers to report upon?

- See page **5.12** for details of setting up groups.

How do I use the Custom Criteria to get more precise information in my reports?

- See page **5.17** for details of report customisation.

How do I setup my Auto Reports to run daily/weekly/monthly?

- Create the **Automatic Reports** to be run (see page **5.19**)
- Use the **'Dates'** section to select when the report or reports are to be run
- If you want to change the time when the reports are run, Open **Advance Timer** by clicking the button on the taskbar
- Click the **'Event List'** button on the toolbar
- Click the **'OK'** button in the **'Information - Events will not...'** window
- Highlight **'Daily from 14/10/97...'** in the **'Events'** pane and click the **'Edit'** button
- Highlight the **'*:ADVANCE\ADVANCE.EXE /AUTO'** entry (the **'***' is the hard drive containing Advance, which is usually **'C'**). Please make sure you **make a note** of which disk Advance is located on

- Click the '**Delete...**' button to remove Automatic Reports from this '**Event**' schedule
- Click '**OK**' to close the '**Event Details**' window
- Click the '**Add...**' button in the '**Maintain Events**' window to open a new '**Event Details**' window
- Set the '**Time**' (in 24-hour clock notation) and click the '**Add...**' button to open a '**Command Details**' window
- Enter '***:ADVANCEADVANCE.EXE /AUTO**', replacing the * with the drive designation (you did make a note of the drive, didn't you)
- Enter the drive and directory (normally C:\ADVANCE) where Advance CMS is located on the '**Directory**' line (use the **tab** key to move between the fields), or use the '**Select...**' button to open the '**Browser**', then select the drive and directory
- Click the '**OK**' button to close this window and '**OK**' to close the '**Event Details**' window
- Click the '**Close**' button in the '**Maintain Event List**' window to return to the main Advance Timer window
- Do not close Timer - use 'minimise' instead. If you were to close the application, none of the scheduled tasks would be run
- See page **4.10** for full details of using **Advance Timer**

How do I change a name against an extension?

- Start **Advance Configure**
- Open the '**Telephone Extensions**' Table
- Locate the extension that needs to be re-named
- **Double-click** on the extension to open the '**Extension Details**' window and enter the new name in the '**Name**' fields
- Click the '**OK**' button, click the '**Close File**' button (third from the left on the toolbar)
- Answer '**Yes**' in the '**Warning - Save Changes**' window
- See page **3.18** for full details

I've changed my carrier, but how do I get Advance to report correctly?

These notes only apply if the new carrier and service are held within Advance CMS. If the carrier is not listed in Advance, Oak Telecom are able to write a Costing Table specific to your requirements. For further details of this service, please contact our Customer Service Centre on 01202 607 000. To change the Advance CMS setting for a listed carrier and service: -

- Start **Advance Configure**
- Open the **'Telephone Line Table'** Table
- Double-click on **'All Lines'** to open the table
- **Highlight** the first of the **'Lines'** which will use the new carrier and click the **'Edit'** button
- To the right of the **'Carrier'** box, click the **down-arrow** to open the **drop-menu**. Select the new carrier and service from the list. Clicking the entry on the menu will select it
- Click **'OK'** to save the change for that line
- Repeat this for every line which will be using the new carrier
- **Save** the changes made to the **'Telephone Lines'** Table
- If the service provided by the new carrier is **non-standard** (i.e. a special tariff scheme negotiated between the user and carrier), amendments will need to be made in the **'Carrier Call Charges'** Table. Please **exercise care** when making any amendments to avoid unexpected costing errors appearing in the reports. **This should only be attempted by the most experienced users.**
- **Open** the **'Carrier Call Charges'** Table and double-click **'All Charge Bands'** to expand the table. Double click the new carrier to show the **'Services'** available.
- All the bands for this service will now be shown (N.B. Band 'b' covers national call rates for *most* of the carriers)
- Make any changes necessary to the bands so that they correspond to the user's new tariff rates (see page 3.28 for details)
- Save any changes made to the table and ensure a **backup** is made of the **'Data'** directory (see page 3.35)

What's the cream thing plugged into my printer port?

- The software protection key, otherwise known as a 'Dongle'. Advance CMS needs to have the dongle connected into the printer port to be able to function. The dongle must be present, even if the computer running Advance hasn't got a printer connected to it. See page **7.3** for more details.

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What do the two lights on the barrier box symbolise?

- The lights (or LED's - Light Emitting Diodes) on the barrier box show the status of the connections and call data flow between the switch and computer
- See page **4.4** for details of the LED states and what they mean

Why can't I report on DDI & CLI numbers?

- Advance CMS can only report on CLI and DDI numbers if: -
 1. The CLI/DDI module has been installed. This can be checked by running the '**About**' utility. If CLI/DDI reporting is required and the module is not installed, please contact either your dealer or Oak Telecom for further details (see page 7.7).
 2. The phone switch is capable of handling CLI/DDI numbers on incoming calls and can report these numbers in the SMDR output. Please consult with your switch installer / maintainer on this point.

I want to export my reports into Excel/Access but the icon is greyed out.

- Advance CMS will only export reports in 'CSV' format if the optional '**Export to Spreadsheet**' module has been installed. If the '**Create Export Report**' icon is greyed out, this means the optional module has not been installed. Please contact either your dealer or Oak Telecom (see page 7.7).

The level of software on my telephone system has changed, what shall I do?

- If the switch software has been updated, do a manual conversion (see page 4.7) and run some reports to see if any change in the call data format has occurred. If the reports are unchanged, then no further action is needed.
- If the call data format has changed, and the reports no longer run correctly, then please contact the Oak Telecom Customer Service Centre on 01202 607 000. Please make sure you have full details of the Advance CMS version you are running, plus switch and the new software version to hand before contacting us.

Advance Classic Help Documents

To assist users in 'problem solving' certain issues within Advance Classic, the following pages contain 'Help' documents produced by the Technical Support team at our Customer Service Centre at Poole. Please see if the problem you are experiencing is covered by one of these before contacting Technical Support.

The subjects covered are: -

1. ACCOUNT REPORTS

To be able to use the Account reports, you will need to be using Account Codes and your telephone system must be outputting account information in the smdr. Below are the Advance reports which represent calls by Account codes.

- **Traffic - Itemised by Time** - Individual calls with high detail.
- **Account - Summary by Client** - Summary of calls made and received by Account code.
- **Account - Itemised by Client** - Individual calls chronologically ordered, by Account code.
- **Account - Itemised by Account/Extension** - Individual calls chronologically ordered by Extn, by Account.

NB. These reports are Account specific, but it is possible to make any Advance report Account Specific, by using the Account tab under Analysis Criteria.

Maintaining Accounts

It is possible to allocate names and apply professional charges to Account Codes.

1. Run the Advance Configure / Setup application.
2. At the Open Settings Table, Select Telephone Clients.
3. Expand Groups/Departments by double-clicking.
4. Edit existing Accounts by double-clicking to open the Account Details window.
5. Delete existing Accounts by selecting the particular account or Group and click the Delete button.
6. Add Groups by selecting All Groups and select the Add Group button
7. To Add an Account, select the particular Group associated and select the Add Account button which opens a blank Account Details window.
8. Firstly Type the Account number in the Account box.

- 9. Type a Name for the Account.
- 10. Apply Professional Charges where applicable. Once Changes have been made, Save and Exit.
- 11. To apply any changes to historical data, run a Selected Convert.

Frequently Asked Questions

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- Q)** On the Account Reports, Account Number 00000 appears. What does this number represent?
- A)** Account 00000 is represented by all calls that do not have an associated Account Code.

- Q)** My company uses Account Codes when making/receiving calls but my Account Reports only show calls for Account 00000.
- A)** If you are having problems reporting on Account Codes then please contact Technical Support for further assistance.

2. AUTOREPORTS

1. Run the Advance Reports application. Logon as Supervisor.
2. Select Edit Auto Setup from the Auto Reports menu.
3. Edit existing AutoReports by selecting a report from the list.
Select the Edit button to alter the Report profile. To delete an AutoReport, select the particular Report and click the Delete button
4. Click the Add button.
5. Select the desired Report, give the Report a Name and also a File Name. Click OK.
6. You will see the new report appear on the list. Under the Dates section, select the previous days date in 'First report to be run on'. (dd/mm/yyyy)
7. Check the circular box for the frequency of the AutoReport to run at.
8. For the until date enter a date in the future i.e. beyond the year 2005.
9. Select the number of calls to be reported on from the drop-down menu.
10. Check the Required Action boxes as desired.

Save=Saves report as a .grp file to the reports directory.

Print=Prints the report to the "default" printer.

Export=Exports report as a .csv file to the reports directory.

Any further "filtering" can be selected under Analysis Period/Criteria.

NB. Changes that are made to Auto-Setup are saved when "Close AutoSetup" is selected from the "AutoReports" menu.

Advance Timer

The Advance Timer application schedules the AutoReports to run at any given time. I.e. If Advance Timer is not running - then Autoreports will not run.

The Advance Timer application can be found running on the taskbar.

1. Expand Advance Timer from the Taskbar.
2. From File, select Events. Selecting OK to the information window. You will be presented with the Maintain Event List window.
3. From the List you should have existing 'Events' available. Select the Event and click the Edit button. This opens the Event Details window.
4. In the Commands to Run section you must ensure that the Auto Reports command is entered as follows,
C:\ADVANCE\ADVANCE.EXE /AUTO
NB. (Assuming c:\advance is the Advance directory). Also check that the "Run Sequentially" box is highlighted. Click OK.
5. Back at the Maintain Event List window click the Close button.
6. Minimise Advance Timer.

Troubleshooting

Autoreports will not run under the following circumstances :

Advance Timer is not running.

Advance Reports is running.

Convert has failed.

Manual reports produce "No calls found"

If you are having problems with Autoreports, please contact Technical Support for further information.

3. CLI & DDI REPORTS

CLI - Calling Line Identification

"Most telephone users know that when you dial 1471, you can find out who made the last call to you. This service is called Call Return. It is also possible, if you have a suitable telephone system, to subscribe to a service where the callers number is displayed on your phone, or an attachment, before you answer the call. This is called Caller Display. These services were first introduced in November 1994.

Caller Display and Call Return are both services which feature the ability to identify the caller's number and are known as Calling Line Identity (CLI) service"

(OfTel : June 1998 : A Consumers guide to Calling Line Identification services)

DDI - Direct Dialling In

The capability of a PABX to route an incoming call to the extension dialled, without the intervention of an operator.

CLI / DDI Module

This module 'captures' the CLI and DDI numbers from incoming calls, provided they are supplied by the PABX, which is then incorporated on Advance reports.

NB. Without it you will not be able to report on CLI or DDI

Below are the Advance Reports which represent calls by CLI & DDI.

Response - Itemised by Extension

Response - DDI Summary by Extension

Response - Extension Summary by DDI

Traffic - Itemised by Time (Custom Criteria set to RDDI)

Account - Itemised by Client

Account - Itemised by Account/Extension

Custom - Summary by CLI/Frequency

Custom - CLI Summary by Area

Custom - Summary by DDI/Frequency

These reports are CLI/DDI specific, but it is possible to make any Advance report CLI/DDI specific, by using the Phone/DDI tab under Analysis Criteria.

Troubleshooting

- Q)** My CLI/DDI Reports are saying "No calls found!" when I try to run them.
- A)** Firstly you need to ensure that the CLI/DDI Module has been installed successfully.

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Run the About program from the Advance Directory.

If About indicates you have CLI/DDI, then you need to determine if your PABX is outputting CLI/DDI information. If you are having problems reporting on CLI/DDI then please contact Technical Support for further assistance.

If About indicates you do not have the CLI/DDI module, then you will need to contact Technical Support for further information.

4. CUSTOM CRITERIA

A list of the functions and their meanings.

Custom criteria can be found in the 'Analysis Criteria' Tab once, Analysis Type and Analysis Period have been selected. The 'Custom Selection' is report sensitive, therefore if the function is not present in the 'Custom Selection' list - it is not available for that report. Enter functions in the Custom Criteria space. Functions are not case sensitive (i.e. capitals or lower case letters can both be used). Separate functions with a space.

Functions and examples

- Answer Time. **AT(5)** will report on calls answered with a ringtime of 5 or more seconds.
- Pre-Cost Discount. **CD(25)** will apply a 25% cost reduction on all calls.
- Post-Cost Uplift. **CU(17.5)** will apply a 17.5% cost increase on all calls.
- Departmental Page Break. **DPB(1,2,3,4,5)** will insert a page break after each department at every level.
- Digit Selection Analysis. **DSA(5)** will only show first five digits of every number.
- Extension Page Break. **EPB** will insert a page break after each extension.
- Exclusive Phone Number. **EPN** and Phone Number Selection set to Single - 192, will report on every call except 192.
- Incoming calls. **INC(L,B)** will report on lost and busy calls only.
- Internal calls. **INT(N)** will not show any internal calls.
- Lost Call Ring. **LCR(50)** will report on lost calls with a ring time of 50 or more seconds.
- Mask Dialed Digits. **MDD(2)** will omit the last two digits of every number dialed.
- Outgoing calls. **OUT(N)** will not show any outgoing calls.
- Pilot Numbers / Account Codes. **PNAC**.
- Report Extensions Tandems calls are via. **RETV** will show exten-

sions against trunk-to-trunk calls - in place of account code.

- Report DDI. **RDDI** will show DDI numbers dialled in place of account code.
 - Response Time. **RT(10)** will change answer target time from 7 to 10.
 - Summary by Quarter-Hour. **SBQ**
 - Select Call Region. **SCR(P,R)** will show Premium and Regional calls.
 - L - Local
 - R - Regional
 - N - National
 - I - International
 - M - Mobile
 - P - Premium
 - Tandem calls. **TAN(N)** will not report on Tandem Calls.
 - Top calls. **TOP(99)** will report on the top 99 calls.
 - Totals. **TOTLS** will report on totals only.
- * Where X is any combination of A - Answered, B - Busy, L - Lost, N - None, O - Original, T - Transferred, U - Unanswered.

5. REPORTING GROUPS

Running reports on Groups

1. Firstly select your desired report under **Analysis Type**, then select the **Analysis Period** and then under **Analysis Criteria** select the desired Tab (i.e. Extn)
2. Select the group from the drop-down menu of available groups.
3. Set any other filters under **Analysis Criteria**.
4. Run the report.

Maintaining Groups

It is important to keep the Group database up-to-date. Remember that this is a separate procedure to maintaining the relating Database in Advance Configure.

1. Run the **Advance Reports** application.
2. Select **Analysis Criteria** and select the appropriate tab, we will use Extensions for this example.
3. Click on the **Groups** button.
4. To Create a group Click the '**New Group**' button or click on the down arrow to select an existing group.
5. Alter the contents of '**Extensions in Group**' simply by dragging and dropping extensions to and from '**Available Extensions**' with the left mouse button.
6. Extensions selected, will have a 'greyed' appearance under '**Available Extensions**'.
7. Once complete, click the **OK** button. Selecting '**Yes**' or '**No**' to whether you would like to save any changes you have made.
8. If you now wish to run a report on this group, follow the instructions above for **Running reports on groups**.

Troubleshooting

- If the database in **Advance Configure** contains duplicate entries then this will produce erroneous reports.
- Groups that contain "Unallocated" Extensions or lines will not report.
- If other extensions appear on reports that are not contained within the group that you have specified, it is most likely that the report is including internal transferred calls to other extensions. You need to suppress these calls by using the **Custom Criteria 'INT(N)'**.

6. PRINTING REPORTS

Printer Set-up

In order to Print Reports you must have a Printer connected to the PC and the appropriate drivers installed. It is also possible to use a Network Printer assuming this has been installed correctly.

Printing Reports

1. Run a report in the normal way.
2. When a report has been displayed on screen, click the Print Report button
3. The standard '**Print Window**' will appear. Select the desired **Printer, Page Range, Copies** etc. and click the **OK** button when ready to print - obviously checking your printer has sufficient paper.
4. The selected Report will now be Printed.

Advance Configure

It is also possible to Print from the **Advance Configure / Set-up** application. Here you can print your **Site, Line, Extn, Phone, PSTN, Charge** and **Digit Translation** details.

1. Run **Advance Configure / Set-up** and select the desired database from the **Open Settings Table**. i.e. Telephone Extensions.
1. Select **Print** from the **File** menu.

Troubleshooting Printer Problems

- Q)** When I print a report, pages/columns are missing or cut off at the end of the page. How do I rectify this?
- A)** You need to set the Printer Page size to A4. Goto **Start | Settings | Printers**. Open the printers **properties** window and change the paper size.

If the problem persists then it is recommended to delete all **printer drivers** and install the standard driver. i.e. replace HP LaserJet 6L with HP LaserJet.

Q) When I run a report, the message '**Insufficient Memory**' appears. I am using a network Printer, when I print locally however - the report runs as normal.

A) Each time a report is run, '**virtual memory**' uses the printers **driver** to calculate the necessary page width/height.

The '**insufficient memory**' may be due to a problem with the **printer driver** and/or the '**virtual memory**' of the PC.

1. Shutdown the PC to clear the '**virtual memory**', reboot after about 10 seconds and try to print again once Windows has reloaded.
2. Delete the **printer drivers** on your PC, **and** also the driver installed 'local' to the network printer.
3. Reinstall the **standard driver** for the network printer locally, and then on your PC. i.e. replace HP LaserJet 6L with HP LaserJet.

If problems persist please contact Technical Support.

7. GLOSSARY OF REPORTING TERMS

There are several Advance reports which highlight specific types of calls, such as the "Response Itemised by Ext" and the "Traffic Itemised by Time".

Below is a list of their meanings.

Please note that outputs vary from PBX to PBX and not all PBX's are capable of showing all the types of call below. Please refer to the appropriate vendor for more information on your PABX **SMDR** capabilities

✓ trn

Term - Transfer Terminated. An extension has answered an incoming call and has transferred it to another extension.

trn ✓ trn

I/T - Transfer Initiated / Terminated. An extension has answered a transferred call, and has transferred the call on, to another extension.

trn ✓

Init - Transfer Initiated. An extension has answered a transferred call, and has 'closed' the call.

X trn

Unanswered. An incoming call is unanswered by the extension, and is transferred to another extension.

trn X trn

Unanswered Transfer. A transferred call is unanswered by the extension, and is transferred to another extension.

B

Busy. An incoming call has received a 'busy' tone (lost). (GPT ISDX only)

B trn

Busy Transfer. An incoming call has received a 'busy' tone, and is transferred to another extension. (GPT ISDX only)

L

Lost. An incoming call has been lost.

Types of calls

Incoming (**Inc**)

Outgoing (**Out**)

Tandem (**Tan**) - A Tandem call (offsite call) has both an incoming part and then an outgoing part. Essentially it will result in a cost because it the PABX has made an outgoing call. An example of a tandem call is if the

user has their particular extension forwarded to a mobile number; any incoming calls are forwarded to the mobile number.

Internal (Int) - An extension to extension call

Unanswered - A call that has unsuccessfully been transferred.

Lost - By definition a lost call is a call that has a ring time but no duration. i.e. The caller waiting for x seconds but disconnected before a pickup.

Exported Terminology

When exporting to .csv format the following terms are explained

Trns Init Unansw Call - This will report against an extension that has received a transferred call that was initiated by another extension, but the call was not answered.

i.e. An extension has transferred a call to this extension and the transferred call has not been answered (possible blind transfer).

Trns Term Unansw Call - This will report against an extension that has received an incoming call that has not been answered. The call has then been transferred to another extension.

i.e. This Extension has received an incoming call that has not been answered, this call has then been automatically transferred (by the telephone system) to another extension.

Trns Init & Term Unansw Call - This will report against an extension that has received a transferred call that was initiated by another extension, the call was not answered and has been automatically transferred to another extension.

i.e. An extension has transferred a call to this extension, the call has not been answered (possible blind transfer). The call has then been automatically transferred (by the telephone system) to another extension.

Trns Term Answ Call - This will report against an extension that has received an incoming call that has been answered and has then been transferred to another extension.

i.e. An Extension has received an incoming call, answered it and then transferred the call to another extension.

Trns Init Answ Call - This will report against an extension that has received a transferred call that was initiated by another extension and

QUESTIONS ANSWERED

answered.

i.e. An extension has transferred a call to this extension and the call has been answered.

Trns Init & Term Answ Call - This will report against an extension that has received a transferred call that was initiated by another extension, the call has been answered and has then been transferred to another extension.

i.e. An extension has transferred a call to this extension, the call has been answered. The call has then been transferred to another extension.

8. USER LOGONS

Maintaining Users

- Select **Users** from the **Options** menu.
- Edit existing users by selecting the user from the **Select User Name** drop-down list.
- Delete existing users by selecting the user from the **Select User Name** drop-down list and clicking the **Delete** button.
- Add **Users** by clicking the **New User** button.

If you wish to limit the user's extension coverage, enter the User Name exactly the same as it appears in the Extensions Database.

NB. The user name must have the '**Last name**' and the '**First Name**' fields entered in the Extension Database. i.e without a '**First Name**' entered, this feature will not work.

Each User can have a unique Reports Directory. (i.e. where reports are saved)

Supervisor will always require Level 1 Security. Therefore do not change the Supervisor security level.

Level 1 : User Access, Enter Configure, Stop Collect, Edit AutoReports, View AutoReports, Run Reports

Level 2 : Enter Configure, Stop Collect, Edit AutoReports, View AutoReports, Run Reports

Level 3 : Edit AutoReports, View AutoReports, Run Reports

Level 4 : View AutoReports, Run Reports

Level 5 : Run Reports

Password Incorrect! (what to do when you have forgotten the password). The default password for the Supervisor is **red**.

If you are unsuccessful in your attempts to logon, then if you have a recent backup of the data directory, copy the **user.dat** file overwriting the existing one. All user configurations including passwords will change back to when the backup was made.

If you do not have a backup of this file you will need to contact Technical Support for further assistance.

9 . R E P O R T M A N A G E M E N T

Saving Reports

1. To Save a report select the **Save Report** button.
2. The **Save Report** window will appear and assume the default **c:\advance\report** directory. Select the desired directory to save the report.
3. When naming the report, you must leave the file extension as ***.qrp** e.g. 'cost1.qrp'

Viewing Reports

To Open a Report from the **Advance Report** application select **Open** from the **File** menu.

Viewing reports remotely

It is possible to view reports (qrp files) on other PC's that do not have the complete Advance package installed.



Reporter.exe



Adv_view.exe

To run **Advance View** from another PC, copy the following files from the **c:\advance** directory to an Advance directory on the other PC. (i.e. create a directory called '**Advance**' on the remote PC and copy these files into that directory), '**Reporter.exe**' and '**Adv_view.exe**'.

Advance View

To run the **Advance View** application click the Windows **Start** button, go to **Programs | Advance Classic** and click **Report View**.

NB. If you are running **Advance View** remotely, then you will need to double click the application from its location in **Windows Explorer**.

To **Open** a Report from the **Advance View** application select **Open** from the **File** menu.

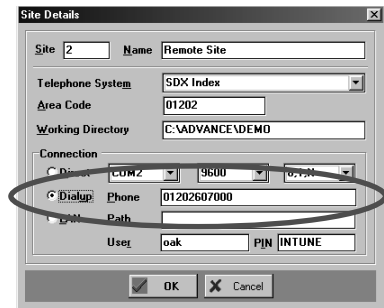
10. REMOTE SITE MANAGEMENT

Advance can report on remote sites via a modem connection through the Advance Communication Centre.

Advance Configure

Firstly any remote sites must be configured correctly. Under **Telephone System** in the **Advance Configure / Setup** application expand the site group and edit the remote site.

Make sure the **Dialup** option is highlighted under **Connection**, and the correct phone number is entered. NB include any PSTN access code such as 9.



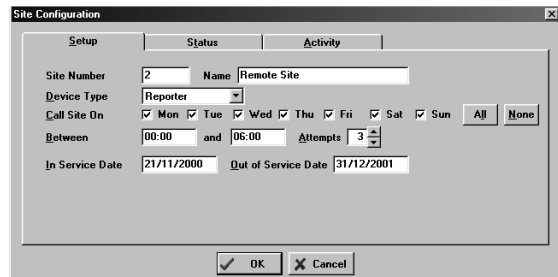
Advance Communication Centre

The **Advance Communication Centre** window should always be running on the taskbar. If it isn't, then run the **ac.exe** from the **c:\advance** directory through **Windows Explorer**.

Site List

All available sites will be listed in the **Site List**. If this window is not on display, select **Site List** from the **Window** menu. Highlight the desired site and select the **Edit** button to check the site settings.

Make sure the correct **Device Type** is selected (Reporter or PC) and also that the **Out of Service Date** is well into the future.



Polling History

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Site ID	Site Name	Date	Start time	End time	Error	Bytes D/L
2	Remote Site	21/11/00	20:48:22	20:49:13	None	0
2	Remote Site	21/11/00	20:49:13	20:49:23	None	0

The **Activity** tab can be used to analyse the history of successful and unsuccessful attempts by clicking on the **Load** button. Another way to run reports which can help troubleshoot dialup problems is the **Polling History** option from the main **Reports** menu.

From this screen you can select a number of options which can then generate a report, which can be used for your own records, or for analysis by **Technical Support**.

COM window

Select the **Com** port from the **Window** menu and you can check the status of any active connections when dialling remote sites.

Manual Dial

1. Select the desired **Site** from the **Site List** then click the **Get Current Calls** button.
2. Downloading should commence. (You will hear the modem dialling and then handshaking) Check the file transfer progress on the **COM** window.
3. Once downloading is complete you will be able to run reports on the downloaded data by running the **Convert** application in the normal way.

Password

The password to close Advance Communication centre is '**byebye**'

11. NO CALLS FOUND

If the warning 'no calls found!' appears when running a report follow the guidelines below.

1. Check the **Taskbar**. Are both **AdvTimer** and **Collect - Com** running?
 - **Yes** - Go to **2**
 - **No** - Go to **5**

2. Close the **Advance Report** application. Run the **Advance Convert** application, once 'initialised' select **New**, and then click **Continue**. Once 'processing is complete' run the **Advance Report** application. Select a **Traffic - Itemised by Time** report, run the Report for the **current date** (do not set any Analysis Criteria.). Does this report run successfully?
 - **Yes** - Go to **3**
 - **No**, still 'no calls found' - Go to **4**

3. The report you previously ran was unsuccessful due to the **Analysis Period** and/or **Criteria** not existing. If the report was a DDI, CLI or Custom report, then refer to the "CLI - DDI" help document. Otherwise run the same report, this time not setting any **Analysis Criteria** and also increase the **Analysis Period**.
 - If the problem persists please call Technical Support for further assistance.

4. Run the **Advance Configure / Set-up** application, logging on with the supervisor password as before. At the **open settings** table select **Telephone System**. Expand by double clicking until your **Site Details** window appears. Make a note of the **Working Directory** (i.e. c:\advance\calls) and also the **Connection Details**. (i.e. COM1 9600 8,1,None) Exit the **Advance Configure / Setup** application.

Use **Windows Explorer** to access the Working Directory. You will see a **collect** file for every day (mmdd-yy.col). Make a **copy** of the **current day's collect file** which you can then

open with **Wordpad**. You will notice a 'time stamp' on each line which relates to the PC clock. 'Page down' to an appropriate time when your site definitely started making and receiving calls. (i.e. 10:00:00) Beside the time stamp we should see **SMDR** (Call data) for each call. Is the collect file empty, apart from the time stamp?

- **Yes**, it is - Refer to **Connection Diagnosis** below
- **No**, data is present - call Technical Support for further assistance

5. Some of the **Essential Components** of the software are not running! What applications are running on the taskbar?

- Just the **collect - com** application - Go to **6**
- Just the **Advtimer** application - Go to **7**
- **Neither collect - com** or **Advtimer** are running - Go to **8**

6. Click the **Start** button. Go to **Programs | Startup** and Select **Advance Timer**.

- This Program is an **Essential Component** of Advance Classic.
- Do not close it, leave it to running on the **Taskbar** - Go to **2**

7. Click the **Start** button. Go to **Programs | Startup** and select **Advance Collect**.

- This Program is an **Essential Component** of Advance Classic.
- Do not close it, leave it to run on the **Taskbar** always.
- For the time that this application has been closed, you do not have any **call data**.

8. Click the **Start** button. Go to **Programs | Startup** and select both **Advtimer** and **Advance Collect**.

- Both programs are **Essential Components** of Advance Classic.
- Do not close them, leave to run on the **Taskbar** always.
- For the time that both these applications have been closed, you do not have any **call data**.

Connection Diagnosis

If you need to determine whether the PBX is collecting any data follow the steps below.

Check 1

Advance Collect will indicate collection by 'counting' from 0 to 999 each time a call is 'closed down'.

6.41

Check 2

The **Barrier Box** is a safety unit, which plugs in to the **Serial communications port** (9-pin) on your PC. This in turn, connects to the PABX via RS232 cable (25-pin). The Barrier Box has two (LED) lights, Data Terminal Ready (DTR) and Receive Data (RXD)

- The **DTR** should be **Red**.
- The **RXD** should be **Green**.

Each time a call is 'closed' down the **RXD** will indicate the **collection of data** by **flickering** from **Green** to **Amber**.

If any of LEDs do not act in the way that we have specified here, then please call Technical Support for further information.

Check 3

'Comcheck' or Hyperterminal will test the validity of the data we are actually receiving from the RS232 connection to the PABX.

1. Maximise the **Collect.com** window and make a note what com port is displayed (COM1 or COM2), then click the **Stop** button. Enter the supervisor's password to close the application.
2. Using **Windows Explorer** access the **c:\advance** directory and **double-click** the file '**comchk.exe**'.
3. This will open a **comchk** window in the **Command Prompt**. You may use the cursor keys and/or the mouse to navigate. Left mouse button or pressing Enter=Select
4. Select **Configure** and change the default settings to match the output from the switch. (i.e. Com Port 1, Baud Rate 9600, 8, 1,

QUESTIONS ANSWERED

None)

5. Select **Run Test**. The message 'Enabling Comms' should appear before the screen goes blank.
6. Every time a call is closed down, the PABX sends the data down the RS232 lead and is then displayed in this window. It will be necessary to make a test call. Use an extension to dial '123'. Once you connect with the speaking clock hang up after 10 seconds.
7. If the connection is correctly configured we will see the 'SMDR' information about that call displayed on the screen.
8. Follow the questions below to see what to do next.

Q) The call is correctly displayed on the screen, what do I do now?

A) Exit the comchk program. Run the Advance Configure / Setup application, enter the Site Details window under Telephone System and match the connection settings as were used in comchk. Save the changes upon exiting and then run the Collect.com application.

Q) There is garbled information on the screen.

A) The connection settings within comcheck do not match the speed settings of the PABX. Press Escape and correct the configuration. Refer to your switch maintainer for these settings.

Q) The display remains blank.

A) There is a problem with either the connection from the barrier box to the PABX or the PABX itself. If this is the case you will need to contact your PABX maintainer. They need to ensure that data is coming out from the switch i.e. with a laptop plugged into the PABX data should be displayed.

Please refer to Technical Support if you require any clarification from us on these above points.

12. RELOCATING ADVANCE

If necessary '**Advance Classic**' can be relocated using the following guidelines. We recommend an I.T Technician/Administrator conducts the operation.

These guidelines assume that there are no changes regarding the current Communication Port Settings, Telephone System settings or the actual Operating System itself. If you do need to change these settings then either refer to the User Manual, or contact Technical Support.

Any changes to the length of cable are your switch maintainer's responsibility.

6.43

Reinstallation to NT4 / 2000

NT and 2000 requires additional drivers to be installed in order to communicate with the dongle. Refer to installing Sentinel Drivers help document.

If you don't install the Sentinel Drivers, the Convert application will not function.

Moving the Advance collection PC to another location

Shutdown the collection PC in the normal way, (i.e. Start button and shutdown). Ensure to Unplug the barrier box connected from the PC's serial 9-pin Com port.

Once the PC has been relocated reconnect the barrier box to the same serial 9-pin Com port.

Moving Software to another PC (standalone method)

On the existing pc, using '**Windows Explorer**' locate the **Advance\Data** folder. This directory contains configuration settings which will be unique to your system. **Copy** this **directory** to a **floppy** disk(s)

With the '**Advance Classic**' install diskettes, please **install** the software onto the new computer into the directory **c:\advance**. Insert the floppy disk(s) containing the data directory and overwrite the folder with this.

Shortcuts on your new PC's desktop to the Advance applications will now be visible. **Double-click Advance Configure / Setup**. Logon as **Supervisor**.

Click '**Telephone System**' and expand all branches by double-clicking. Double clicking on your site(s) will display your '**Site Details**'. Under working directory make a **note** of the **directory** which is displayed. i.e. C:\Advance\Calls. **Close** the **Advance Configure / Setup** application.

Using **Windows Explorer** create this **working directory** as a **subdirectory** of **Advance** - if it is not already present. Please be aware that if you wish to run reports on historical data prior to this operation you will need to copy the relevant contents of the original working directory, to this working directory. (i.e. **.col** and **.tel** files)

Restart the pc. Both **Advance Timer** and **Advance Collect** should **automatically start-up**, if so then software relocation is now complete, go to moving hardware. If not then follow the next step.

It will be necessary to create '**shortcuts**' on your '**desktop**'. From the desktop, **right-click** the mouse and select '**New | Shortcut**' from the menu options. When the '**Create Shortcut**' window opens, use '**Browse**' to locate the '**Advance**' folder on the hard disk. When you have located the main '**Advance**' folder, **select** the file called '**Adv_conv.exe**' then enter a **name** for the '**shortcut**' i.e. '**Advance Convert**' then click the '**Finish**' button. **Repeat** this **process** for '**Advance.exe**' (Advance Reports) and '**Advsetup.exe**' (Advance Configure). When the '**desktop shortcuts**' have been created, you then need to create **two** '**shortcuts**' in the '**Startup**' menu.

The '**Startup**' menu contains '**shortcuts**' to applications or services which are automatically started when the PC boots up, as soon as a user logs on to the machine. **Right-click** the mouse while the **cursor** is over the '**taskbar**' (which runs along the bottom of the desktop) and select '**Properties**' from the '**context-sensitive menu**'. This opens the '**Taskbar and Start Menu Properties**' window in the bottom left-hand corner of the screen.

Click the '**Advanced**' tab, then click the '**Advanced**' button to open **Windows Explorer** showing the '**Start Menu**'. **Double-click** '**All Users**' in the **left-hand pane** to expand the folder tree, **double-click** '**Start Menu**', then **double-click** '**Programs**'. **Single-click** '**Startup**' which will display all the '**shortcuts**' in the **right-hand pane**.

Place the mouse **cursor** in the **right-hand pane** and **click** the **right mouse button** to invoke the '**context-sensitive**' menu. Select '**New | Shortcut**' to open the '**Create Shortcut**' window. Use the '**Browse**' button to locate the main '**Advance**' folder on the hard disk. Locate and **select** '**Advtimer.exe**' by **highlighting** the application and clicking '**OK**' then giving the new '**shortcut**' a name, i.e. '**Advance Timer**', then click the '**Finish**' button.

Repeat this procedure to add '**Collect.exe**' to the '**Startup**' menu and name the '**shortcut**' '**Advance Collect**'. **Close** the **Windows Explorer** by clicking the '**X**' button in the top right-hand corner of the window, then click the '**OK**' button to close the '**Taskbar and Start Menu Properties**' window and apply the changes.

Check the changes by clicking '**Start | Programs | Start-up**' -; Collect and Timer should be present. **Re-start** the **computer** and check that '**Advance Timer**' and '**Advance Collect**' appear on the '**taskbar**' when the machine has **re-started**.

Moving Software to another PC (network method)

Copy the **c:\advance** directory over the network onto the **replacement PC's** local hard disk (c drive)

It will be necessary to create '**shortcuts**' on your '**desktop**'. From the desktop, **right-click** the mouse and select '**New | Shortcut**' from the menu options. When the '**Create Shortcut**' window opens, use '**Browse**' to locate the '**Advance**' folder on the hard disk. When you have located the main '**Advance**' folder, **select** the file called '**Adv_conv.exe**' then enter a **name** for the '**shortcut**' i.e. '**Advance Convert**' then click the '**Finish**' button. **Repeat** this **process** for '**Advance.exe**' (Advance Reports) and '**Advsetup.exe**' (Advance Configure). When the '**desktop shortcuts**' have been created, you then need to create **two** '**shortcuts**' in the '**Startup**' menu.

The '**Startup**' menu contains '**shortcuts**' to applications or services which are automatically started when the PC boots up, as soon as a user logs on to the machine. **Right-click** the mouse while the **cursor** is over the '**taskbar**' (which runs along the bottom of the desktop) and select '**Properties**' from the '**context-sensitive menu**'. This opens the '**Taskbar and Start Menu Properties**' window in the bottom left-hand corner of the screen.

Click the '**Advanced**' tab, then click the '**Advanced**' button to open **Windows Explorer** showing the '**Start Menu**'. **Double-click** '**All Users**' in the **left-hand pane** to expand the folder tree, **double-click** '**Start Menu**', then **double-click** '**Programs**'. **Single-click** '**Startup**' which will display all the '**shortcuts**' in the **right-hand pane**.

Place the mouse **cursor** in the **right-hand pane** and **click** the **right mouse button** to invoke the '**context-sensitive**' menu. Select '**New | Shortcut**' to open the '**Create Shortcut**' window. Use the '**Browse**' button to locate the main '**Advance**' folder on the hard disk. Locate and **select** '**Advtimer.exe**' by **highlighting** the application and clicking '**OK**' then giving the new '**shortcut**' a name, i.e. '**Advance Timer**', then click the '**Finish**' button.

Repeat this procedure to add '**Collect.exe**' to the '**Startup**' menu and name the '**shortcut**' '**Advance Collect**'. **Close** the **Windows Explorer** by clicking the '**X**' button in the top right-hand corner of the window, then click the '**OK**' button to close the '**Taskbar and Start Menu Properties**' window and apply the changes.

Check the changes by clicking '**Start | Programs | Start-up**'; **Collect** and **Timer** should be present. **Re-start** the **computer** and check that '**Advance Timer**' and '**Advance Collect**' appear on the '**taskbar**' when the machine has **re-started**. Go to moving hardware.

Hardware to another PC

Unplug the **Barrier Box** connected to the current PC's serial 9-pin Com port and **reconnect** it to the relevant **Com Port** on the **new PC**. **Check** that the **Barrier Box** is **connected** directly to the **PABX**.

Unplug the **Dongle** from the current PC's **parallel port** and **connect** to the **parallel port** on the **new PC**. Your hardware relocation is now complete.

13. USING YOUR DONGLE

Identify your Dongle

A **Dongle** is a small piece of hardware that is directly connected to the **Parallel Port** on the collection PC. Make sure it resembles this image.

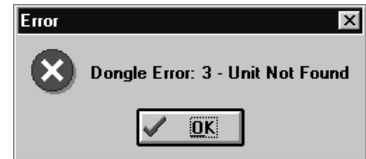
If any other **parallel device** such as a **printer**, is connected to the pc, it will connect to the **Dongle** first, which in turn connects to the PC. The **Dongle** is a Software Protection Key ; without it connected, Advance Classic will not function fully.



6.47

Troubleshoot Dongle Errors

A **Dongle Error** occurs when the **Advance Convert** application **cannot detect** the **Dongle**. This causes an **Error** message to appear onscreen.



Action

- **Check** that the **Dongle** is **connected** directly to the **parallel port**.
- **Check** that the **Dongle** is **inserted** correctly and is **not loose**.
- **Run** the **Advance Convert** application. If convert runs successfully then the **Dongle** has been detected. If the **Error** message **still appears** then proceed to the **next step**.
- While the **Computer** is **switched off**, completely **remove** the **Dongle** and then **re-insert** it. Make sure to **secure** the **Dongle** using the **screws**.
- **Run** the **Advance Convert** application. If convert runs successfully then the **Dongle** has been detected.
- If the **problem persists**, then follow the **instructions** to run the **Sentinel Medic** utility, which will **install** the **Sentinel drivers**.



Install Dongle (Sentinel) Drivers

You will need to install the Sentinel Drivers if :

- You are attempting to run the application under Windows NT.
- Your key is not being detected under Windows 95/98 or Windows 3.x
- You are having conflicts with other Parallel port devices (printers, plotters, etc.)



Error Code 12 refers to **Windows NT**. **Error Code 9** refers to **Windows 95/98**.

Action

If you are running **Windows NT**, your user profile will need to have **Full Administrative rights** to install the drivers, i.e. you need to be **logged on** as '**Administrator**'.

Download and run the **SentinelMedic32.exe** (you can **download** the file from **our website**). **Run** the **application** once downloaded.

You will be taken through an installation wizard, once complete click the **Finish** button. (make sure the '**Launch the sentinel medic**' is **selected**.) A window will then appear offering to **install** the **Sentinel System Driver**. Make sure '**Install parallel Port Driver**' is selected, then click the '**OK**' button. If the Sentinel **system driver** is **installed successfully** then the '**Sentinel Medic**' utility will appear.

Make sure that the '**SuperPro**' Key is **highlighted**, then click the '**Find Keys**' button to attempt to detect the **Dongle**. Click on '**Medic says**' for a summary of the results. Obviously if '**Unit is found**' the **problem** has been **solved** and you may continue to use **Advance Convert**. Refer to Technical Support if you still have problems.

If the **results** highlight an **error**, then follow through the **recommendations** by clicking on '**Medic says**'.

If the problems persist you can click on the '**Run Sentinel Contact**

QUESTIONS ANSWERED

Wizard' in order to contact **Rainbow** directly or contact **Technical Support** for further assistance.

14. EDITING EXTENSIONS

Extension Reports

Many of Advance Reports are presented by extension. It is also possible to make any report Extension specific by using the **Extn** tab under **Analysis Criteria**.

Maintaining Extensions

- It is important to keep the extension database up-to-date.
 - If the database contains duplicate extension numbers erroneous reports will be produced.
1. Run the **Advance Configure / Setup** application.
 2. At the **Open Settings Table**, select **Telephone Extensions**.
 3. Expand **Groups/Departments** by **double-clicking**.
 4. Edit existing Extensions by double-clicking to open the **Extension Details** window.
 5. **Delete** existing **Extensions** by selecting the particular **Extension** or **Group** and click the **Delete** button.
 6. **Add Groups** by selecting **All Groups** and select the **Add Group** button.
 7. **Drag and Drop Extensions** from group to group **with** the **left mouse button**.
 8. To **Add** an **Extension**, **select** the desired **Group** and click the **Add Extn** button which opens a blank **Extension Details window**.
 9. **Specify** the **Site** from the drop down select. (Typing the site will not allocate the Extension).
 10. Type the **Extn No**.
 11. Select a **Title** if desired.
 12. A **Last Name** must be **typed**, **First Name** is **optional**.
 13. **'User'** must always be selected to **Primary**.

14. Once **Changes** have been **made, Save** and **Exit**.

Unallocated Extensions

- **Unallocated** extensions are **extensions** that either **do not exist** in the **Telephone Extensions database**, or have **not** been **setup correctly** into the database.
- **'Offsite calls'** that are **not initiated** by a particular extension will also appear under **'unallocated extensions'**. **'Offsite calls'** appear on some cost reports and also as type 'TAN' on Traffic reports.
- Unallocated extensions that are added to Reporting Groups will not produce any calls.
- **Running a Traffic - Summary by Group/Extn** report will **display** all **unallocated** extensions for a period of time.

6.51

Suggested method for allocating extensions

Run and print a **Traffic - Summary by Group/Extn** Report for a period of time. The **last part** of the report contains all **'unallocated'** extensions, **enter/check** these extensions following the instructions as per **Maintaining Extensions** on page 6.50.

Costing Tables

Oak Telecom maintain a basic list of costing tables, which include the following

British Telecom, C&W, Energis, Interoute, Scottish Telecom & MCI-WorldCom

These tables are based upon the standard published tariffs for these carriers. It should be noted that under certain circumstances, not every destination is clearly identified by the carrier. This is true of many international destinations.

Oak Telecom will make their best endeavours to ensure that an approved tariff is applied. However, where no call identification is provided, Oak Telecom will make a default selection.

We can provide individual tariffs, as long as comprehensive details are provided by the chosen carrier, in addition to any customer-negotiated tariff options.

Chapter Seven

APPENDICIES & HOUSEKEEPING

7.1

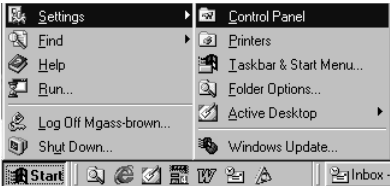
Regional Settings

Advance Classic will only function correctly if the host computer is set to run under '**English (United Kingdom)**'. In many cases, the Windows operating system is installed under the 'default' option, which is '**English (United States)**'.

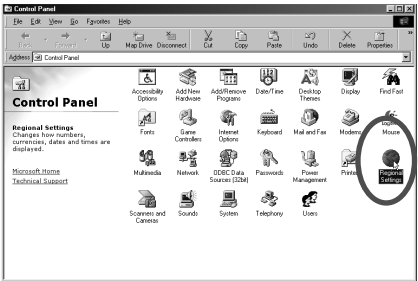
Unfortunately this latter option uses a different date format, which causes errors when running Advance Convert. In addition, the United States currency setting will result in the '\$' symbol being printed on reports.

Before installing Advance Call Management software, the user should ensure that the '**Regional Setting**' being used by the computer is correct. To check the current setting '**Properties**', the user clicks the '**Start**' button on the taskbar and selects...

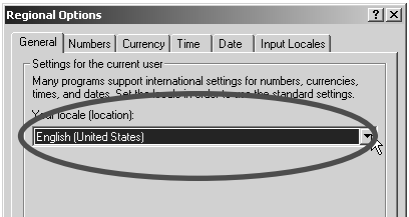
...'**Settings**', '**Control Panel**'.

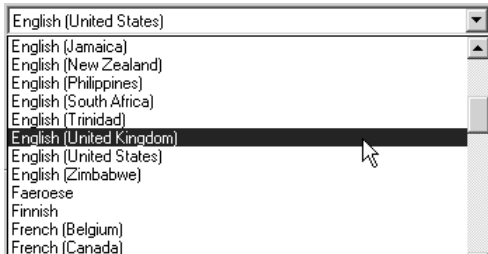


When the '**Control Panel**' opens, the user double-clicks the icon marked '**Regional Settings**' (circled in the screen-shot) to open...

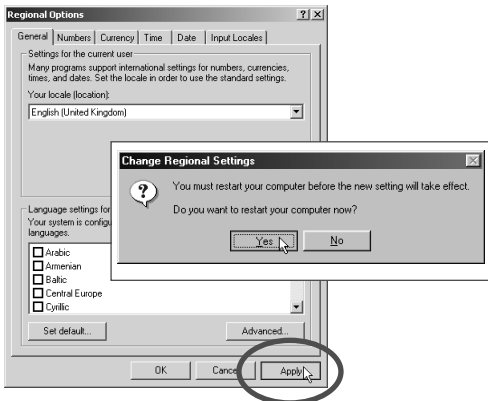


the '**Properties**' window for the '**Regional Settings**' running on the PC. The country setting is shown in the text-box (circled in the screen-shot). If the setting is '**English (United Kingdom)**', then no further action need be taken. If, however, the setting shown is '**English (United States)**' then the user clicks the down-arrow on the right of the text-box to invoke the





drop-menu and select (highlight) '**English (United Kingdom)**' to select this setting.



This setting must be 'activated' by clicking the '**Apply**' button at the foot of the window (circled in the screenshot).

To complete the '**Regional Settings**' changes the computer may need to be re-started, which will happen automatically when the '**Apply**' button is clicked.

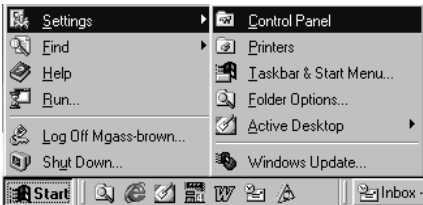
When the computer re-boots, the new settings will be applied.

CHANGING REGIONAL SETTINGS ON THE PC

If by any chance the Advance Call Management System software is already running on the PC when user discovers the '**Regional Setting**' is incorrect (due to Advance Convert failing to function, invalid date errors or '\$' symbols being printed on reports) then a slightly different approach needs to be adopted.

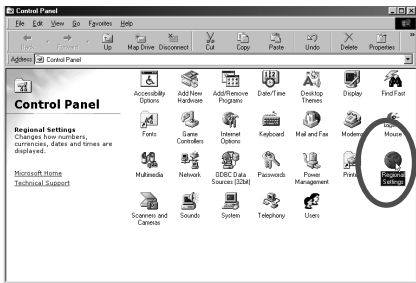
When Advance is installed, all the settings applicable to the software are written in an '**INI**' file, held within the main Advance folder. If the '**Regional Setting**' is changed after the software has been installed, due to a known issue with Microsoft Windows, the first change applied is not written to the '**INI**' file, therefore the '**Regional Setting**' must be changed twice. To accomplish this, we recommend the user follows these steps: -

Click the **'Start'** button on the taskbar and select...
...**'Settings', 'Control Panel'**.

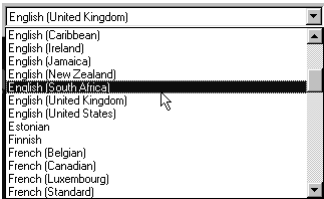


7.5

Double-click the icon marked **'Regional Settings'**. If the text-box is showing an entry other than **'English (United Kingdom)'**,...



... select any other option, i.e. **'English (South Africa)'** or **'English (New Zealand)'** by highlighting the entry and click the **'Apply'** button at the bottom of the window. When the **'Change Regional Settings - you must restart your computer...'** window appears, click the **'No'** button.



The user then selects the correct property setting in **'Regional Settings'**, which is **'English (United Kingdom)'** by highlighting the entry on the drop-menu and clicking the **'Apply'** button. This time the users should click the **'Yes'** button in the **'Change Regional Settings'** window to restart the computer.

When the system re-boots, the correct **'Regional Setting'** will be applied and the change should be written to the Advance INI file.

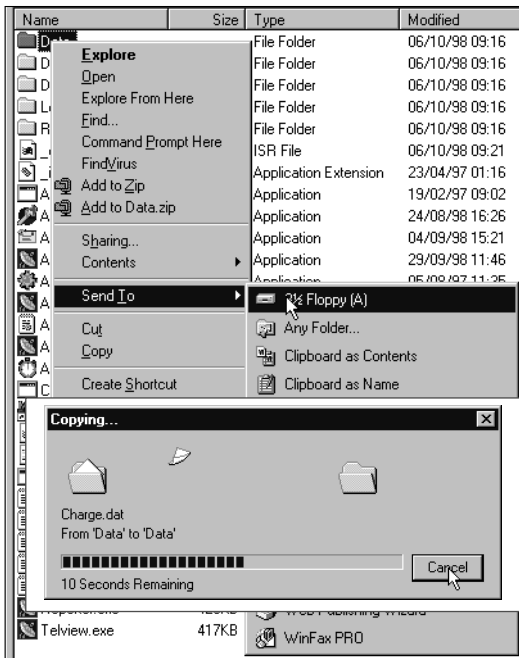
Essential Housekeeping

During the course of setting up '**Telephone Extensions**', '**Telephone Numbers**', etc. changes have been made to the various files held in the '**Data**' folder (under '**Advance**'). If, subsequently there is a problem with the PC's hard drive and the Advance software has to be reloaded, the files in the Data folder will revert to their installation default condition. The settings would then have to be re-entered **UNLESS** a **back-up** of the '**Data**' folder was made onto **floppy disk** (or equivalent). A black Backup disk is included with the other installation disks for that purpose.

*After making any adjustments with the Advance Configure program, use **Windows/NT Explorer** to copy the entire '**Data**' folder onto the floppy disk and store the disk safely away from the PC until the next time a backup is needed. Following this procedure could save hours of work in the event of a PC failure.*

The quickest way of achieving this is to select the '**Data**' folder and click the **right** mouse button. From the 'context sensitive' menu, select '**Send To**'. From the sub-menu choose the '**3½ Floppy (A)**' option (first item on the menu). This will copy the contents of the '**Data**' folder onto the floppy. A '**Copying...**' window opens, showing the progress of the file copy process.

When the task is complete, clearly label the disk and please put it in a safe place.



Software Protection Key

The Advance CMS is safeguarded by a Software Protection Key, which is a small but intelligent 'connector' device that plugs into the computer's parallel printer port. This form of protection device is colloquially known as a 'Dongle' and we have used this name in this guide. Without the Dongle in place, the software will not function fully.

The unit supplied with your system is called a Sentinel and is manufactured by Rainbow Technology (a market leader in this field) for Oak Telecom. The unit is transparent in operation (i.e. it is invisible to other devices connected to the port) and is not known to affect either hardware or software using the parallel port.

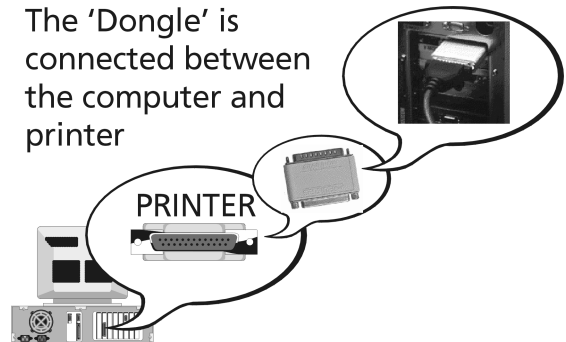
The Dongle connects between the computer and printer, or sits in the **printer port**, if no local printer is attached.

The Software Protection Key contains information about which software modules have been purchased, the extension limit licensed, and the period for which the software will operate. The Software Protection Key also contains a unique serial number which identifies the software for support and upgrade purposes. Please keep this number safe, as it will be needed if a Support Call is made to the Oak Telecom Customer Service Centre.



7.7

The 'Dongle' is connected between the computer and printer



PBX to Barrier Box Adaptor Cables

We have found that the the vast majority of switches can be accommodated using either the standard cable supplied with the Barrier Box, or one of these seven variants. In the case of the modified cables, only the switch (PBX) connector end needs alteration.

Type	Data Port Type	Flow Control	PBX End	Barrier End
Std	25-Way DCE	No or DTR-only	No adaption needed	
A	25-way DCE	Yes	(2) (2) 3 _____ 3 7 -.-.-.-.- 7 4 ----- 20 20 ---┐	
B	25-way DTE	No	(3) (2) 2 _____ 3 7 -.-.-.-.- 7 20	
C	25-way DTE	Yes	(3) (2) 2 _____ 3 7 -.-.-.-.- 7 5 ---┐ 6 ---┐ 8 ---┐	20
D	9-way DCE	No	(3) (2) 2 _____ 3 5 -.-.-.-.- 7 20	
E	9-way DCE	Yes	(3) (2) 2 _____ 3 5 -.-.-.-.- 7 4 ----- 20 7 ---┐	
F	9-way DTE	No	(2) (2) 3 _____ 3 5 -.-.-.-.- 7 20	
G	9-way DTE	Yes	(2) (2) 3 _____ 3 5 -.-.-.-.- 7 1 ---┐ 6 ---┐ 8 ---┐	20

Switch Data Port Listing

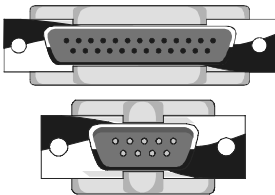
Switch Type	Port	Adaptor	Notes
Alcatel 1600	25 Female	C	Gender changer
Alcatel 4100	25 Female	Std	
Alcatel 4220	25 Female	Std	
Alcatel 4300	25 Male	Std	
Alcatel 4400	25 Female	Std	
Hicom 125/130/150	25 Male	C	
IDX/ISDX/ITDX	25 Female	Std	
Interconnect 3000	9 Male	G	
ISX 200	9 Female	G	
Mitel SX2000	25 Female	A	
Panasonic DBS	25 Female	C	
SDX Index	9 Female	D	

RS-232C connections

RS-232C Interface Standard of the Electronic Industries Association (same as V.24 from CCITT). The table below shows details of the pin usage of 25 and 9-pin serial connectors running under the RS-232C (V.24) standard.

Pins 3/2 and 2/3 transfer the data signals.

7.10



25 & 9-pin serial connectors

Number of pins on connector		Signal	Direction	Description
25-pin	9-Pin			
1	-	-	-	Protective Ground
2	3	TD	DTE→DCE	Transmitted Data
3	2	RD	DCE→DTE	Received Data
4	7	RTS	DTE→DCE	Request to Send
5	8	CTS	DCE→DTE	Clear to Send
6	6	DSR	DCE→DTE	Data Set Ready
7	5	-	-	Signal Ground (common)
8	1	DCD	DCE→DTE	Data Carrier Detect
20	4	DTR	DTE→DCE	Data Terminal Ready
22	9	RI	DCE→DTE	Ring Indicator
23	-	DSRD	DCE↔DTE	Data Signal Rate Detector

DTC = Data Carrier Equipment
DTE = Data Terminal Equipment

The Oak Telecom Barrier Box is always terminated with a 25-way 'D' connector. The pins used to connect with the computer are: -

- Pin 3** - Receive Data
- Pin 7** - Signal Ground (reference voltage)
- Pin 20** - DTR (voltage level from PC which indicates if the PC is ready to receive data. This voltage level is also available for flow control)

The conductors colours used by Oak Telecom are: -

- Yellow** - RD (Received Data)
- Red** - TD (Transmitted Data)
- Black** - Signal Ground (Common)
- Blue** - DTR (Data Terminal Ready)

Please turn to page 7.8 for details of PBX to Barrier Box adaptor cable variations.

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Contacting Us

We hope this guide, and the training you receive help you make the most of Advance Classic Call Management System. With the software fully configured, you almost certainly have the most flexible and adaptable call management program available on the market.

Please take time to become familiar with the product and find out how to get the best out of Advance Classic. If you have any questions regarding Training issues, please contact: -

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